General Catalog 105

Standard of Comparison

KLEIN

tools

Mathias Established 1857 KLEIN & Sons Chicago, Ill. U.S.A.

7200 McCORMICK ROAD • CHICAGO 45, ILLINOIS

MATHIAS KLEIN & SONS, INC.

Over a century of experience manufacturing tools for

- **LINEMEN**
- **ELECTRICIANS**
- **ELECTRONICS INDUSTRY**
- **GENERAL INDUSTRY**

MATHIAS KLEIN & SONS, INC.

7200 McCormick Road, Skokie

P. O. Chicago 45, Illinois

Tel. JUniper 8-6820

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General Catalog 105

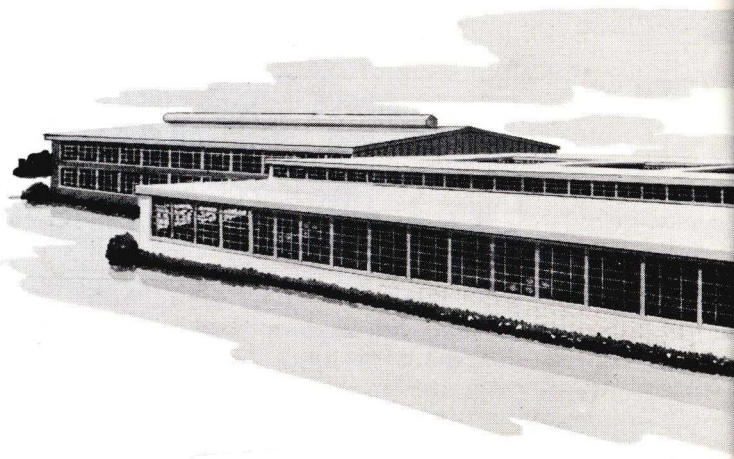
PRINTED IN U. S. A.

KLEIN QUALITY "SINCE 1857"

For more than a century, the name Klein has stood for the finest in tools and equipment. That reputation for quality has been won by a combination of the most modern facilities, the highest standard of workmanship and by individual inspection and testing to make sure that every tool is worthy of the name Klein.

The name Klein is, of course, envied by others and has been widely imitated. Suffice it to say that while the designs and patterns that Klein originated and made famous have been widely copied, no one has ever been able to equal Klein quality. That's why Klein still remains the standard of comparison by which other tools are judged.

Every genuine Klein tool is stamped with the Klein trademark, "M. Klein & Sons" or the full name "Mathias Klein & Sons, Inc." To avoid imitations we caution purchasers that tools marked "Klein" or "Klein Pattern" are not of Klein manufacture. Before you invest in tools, be sure they are genuine Kleins.



OVER 100 YEARS OF SERVICE TO THE ELECTRICAL INDUSTRY

When Mathias Klein opened his forge shop in 1857, Chicago was but a village on the American frontier. The Electrical Industry was taking its first uncertain steps with the coming of the telegraph. Since there were no adequate tools for the early linemen to use, they improvised as best they could.

As construction crews moved westward, bringing speedy communication to the outlying towns, some of the workmen heard of the reputation Mathias Klein had won for his skill and high-quality workmanship.

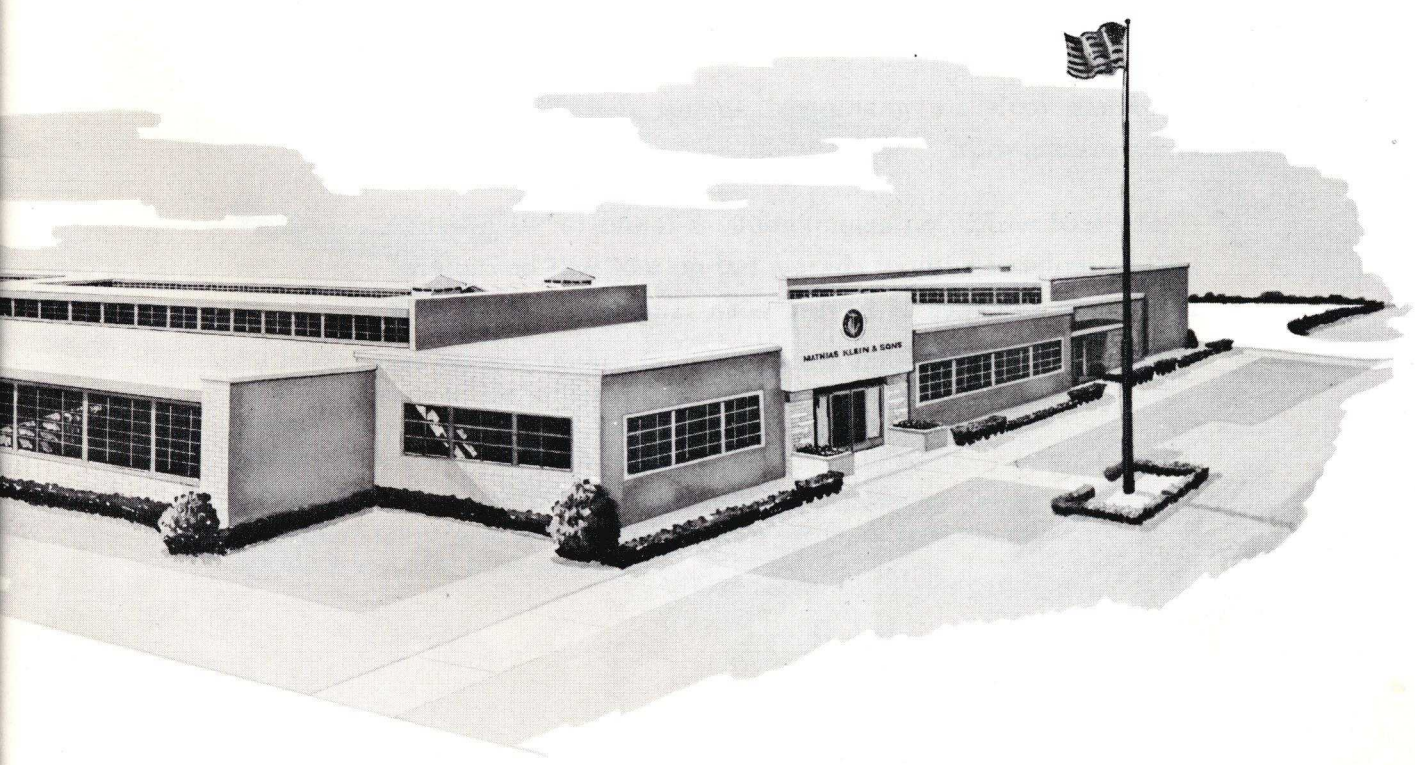
At their suggestion, he designed and forged a sturdy plier to meet the special needs of line construction work—so a new industry was born.

By word of mouth, information was passed along that at Mathias Klein's Forge Shop you could buy tools which would give better performance, last longer and result in more general satisfaction.

Business grew; and as the telephone followed the telegraph, as power lines opened up new possibilities to industry, as railways expanded, the demand for Klein quality tools continued to grow.

The electronics field opened up a wide use of Klein Pliers, for manufacturers found that these quality tools saved workers time in any wiring assembly. Home workers, proud of the work they did, also were satisfied with nothing less than Kleins. And so, the call went for more highly specialized and better types of equipment for all electrical work.

If the success of Mathias Klein & Sons can be described by one word, that word is "quality." This is as true today as it was more than a century ago when the company was founded.



STATEMENT OF QUALITY

Genuine Klein tools are manufactured with utmost care to insure quality of material and workmanship. Each tool is thoroughly inspected before shipment. Any tool proving unsatisfactory as to either material or workmanship should be returned directly to us for inspection and adjustment of complaint. Distributors are not authorized to adjust complaints or make replacements.

If we find the claim substantiated, we will gladly make replacement but we cannot be expected to replace tools broken by misuse or accident. In no case will replacement be made of tools showing evidence of grinding, filing or re-tempering.

GUARANTEE

All Klein tools are guaranteed against defect in material and workmanship.

Any tool which, on examination, is found to be defective will be replaced without charge, but no tool will be replaced if it shows evidence of having been tampered with or if it has been improperly used.

KLEIN PLIERS

All Klein Pliers are drop forged from high-grade alloy tool steel made specifically to our analysis. Every plier is individually fitted, tempered, adjusted and tested. The test in every case is far in excess of any pressure that could be applied by hand.

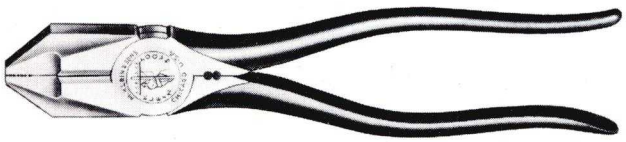
Klein Pliers have long been recognized as the standard by which other pliers are judged. This is why Kleins are preferred everywhere by men who know good tools.

SIDE CUTTING PLIER

Dimensions in inches*

Cat. No.	A	B	C	D	E	Av. Wt. Per Doz.
201-5	5 3/16	13/16	23/32	3/8	13/32	3 1/4 lb.
201-6	6 1/4	1 3/32	29/32	1/2	9/16	5 1/4 lb.
201-7	7 5/16	1 9/32	1 5/32	1/2	5/8	7 1/4 lb.
201-8	8 1/2	1 7/16	1 7/32	5/8	23/32	11 1/4 lb.
201-9	9 1/4	1 19/32	1 5/16	5/8	25/32	13 1/4 lb.

SIDE CUTTING PLIER
(WITH SLEEVE TWISTERS)



Dimensions in inches*

Cat. No.	A	B	C	D	E	Av. Wt. Per Doz.
212-6	6 1/4	1 3/32	29/32	1/2	9/16	5 1/4 lb.
212-7	7 5/16	1 9/32	1 5/32	1/2	5/8	7 1/4 lb.
212-8	8 1/2	1 7/16	1 7/32	5/8	23/32	11 1/4 lb.

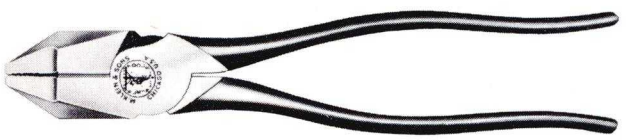
SLEEVE OPENINGS

In 6-in. and 7-in. pliers for Nos. 14 and 17 N.B.S. and No. 12 B.& S. (.045). In 8-in. pliers for No. 12 N.B.S. and No. 10 B.& S. (.104).

This series of pliers can be modified with meter seal instead of sleeve openings, to order only. Prices on application.

HIGH LEVERAGE PLIERS

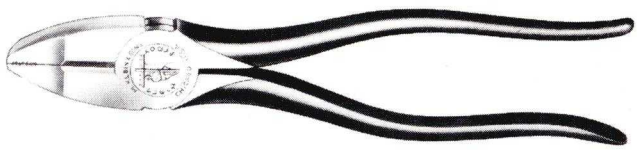
U. S. Patent No. 2,746,145
Can. No. 532,760



Dimensions in inches*

Cat. No.	A	B	C	D	E	Av. Wt. Per Doz.
213-9	9 1/4	1 19/32	1 5/16	5/8	25/32	12 1/2 lb.

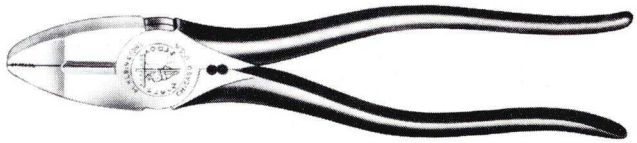
SIDE CUTTING PLIER
NE TYPE (STREAMLINED)



Dimensions in inches*

Cat. No.	A	B	C	D	E	Av. Wt. Per Doz.
201-5NE	5 3/16	13/16	23/32	3/8	13/32	3 1/4 lb.
201-6NE	6 1/4	1 3/32	29/32	1/2	9/16	5 1/4 lb.
201-7NE	7 5/16	1 9/32	1 5/32	1/2	5/8	7 1/4 lb.
201-8NE	8 1/2	1 7/16	1 7/32	5/8	23/32	11 1/4 lb.
201-9NE	9 1/4	1 19/32	1 5/16	5/8	25/32	13 1/4 lb.

SIDE CUTTING PLIER
N E TYPE (STREAMLINED) WITH SLEEVE TWISTERS



Dimensions in inches*

Cat. No.	A	B	C	D	E	Av. Wt. Per Doz.
212-6NE	6 1/4	1 3/32	29/32	1/2	9/16	5 1/4 lb.
212-7NE	7 5/16	1 9/32	1 5/32	1/2	5/8	7 1/4 lb.
212-8NE	8 1/2	1 7/16	1 7/32	5/8	23/32	11 1/4 lb.

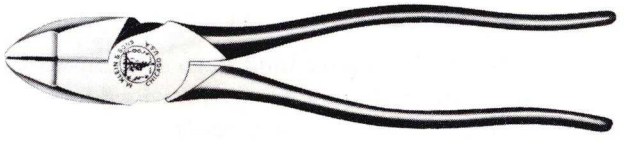
SLEEVE OPENINGS

In 6-in. and 7-in. pliers for Nos. 14 and 17 N.B.S. and No. 12 B.& S. (.045). In 8-in. pliers for No. 12 N.B.S. and No. 10 B.& S. (.104).

This series of pliers can be modified with meter seals instead of sleeve openings, to order only. Prices on application.

HIGH LEVERAGE PLIER
N E TYPE (STREAMLINED)

U. S. Patent No. 2,746,145
Can. No. 532,760

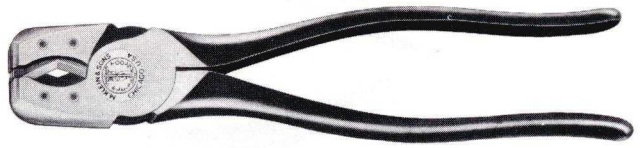


Dimensions in inches*

Cat. No.	A	B	C	D	E	Av. Wt. Per Doz.
213-9NE	9 1/4	1 19/32	1 5/16	5/8	25/32	12 1/2 lb.

*For dimension drawings of Klein Pliers, see page 20.

HIGH LEVERAGE ACSR CUTTER



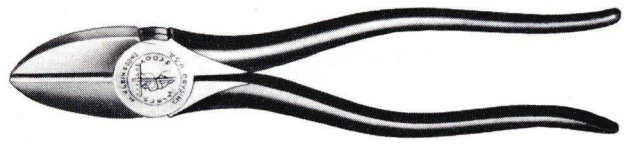
Developed for cutting ACSR up to and including No. 1/0. Knives make clean cut in aluminum strands and do not injure core. Knives easily replaced.

Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
055	8 5/8	1	1 1/4	5/8	12 3/4 lb.
055-K	pair of extra knives				

OBLIQUE CUTTING PLIER

Heavy-Duty Pattern with "Handform" Handles

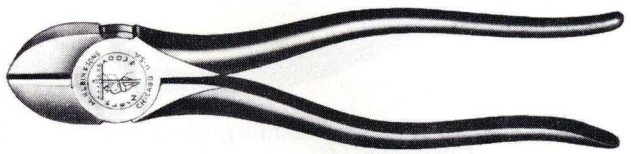


Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
220-7	7 11/16	1	31/32	1/2	7 lb.

OBLIQUE CUTTING PLIER

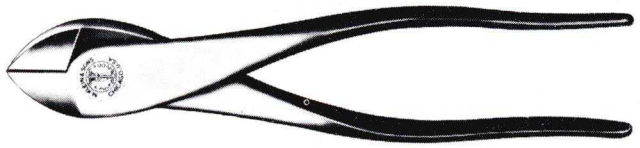
Short Nose Heavy-Duty Pattern with "Handform" Handles



Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
220-7SN	7 1/4	5/8	31/32	1/2	6 3/4 lb.

HIGH LEVERAGE OBLIQUE CUTTING PLIER

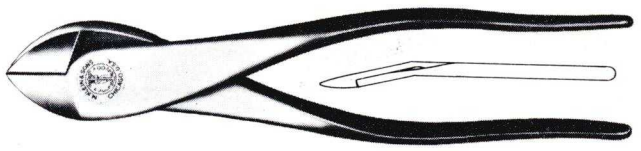


Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
228-8	8	13/16	1 3/16	7/16	7 lb.

HIGH LEVERAGE OBLIQUE CUTTING PLIER

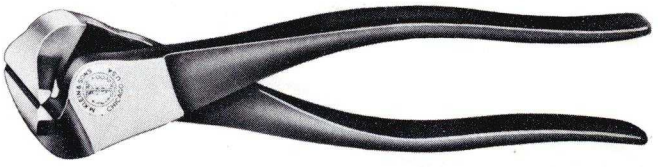
Bent Handles



Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
238-8	8	13/16	1 3/16	7/16	7 lb.

HIGH LEVERAGE END CUTTING PLIER



Permits cutting wire or nails close to work. "Handform" handles as used in Klein Side Cutting Pliers.

Dimensions in inches*

Cat. No.	A	B	C	D	E	Av. Wt. Per Doz.
232-8	7 23/32	7/8	1 1/2	1/2	1 1/2	7 1/2 lb.

*For dimension drawings of Klein Pliers, see page 20.

OBLIQUE CUTTING PLIER

Midget Pattern—Flush Cutting

Plier handles red plastisol covered.

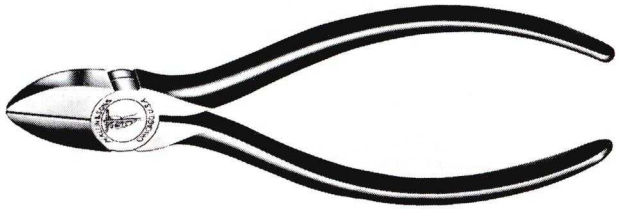
Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
D 257-4	4 3/16	1/2	7/16	1/4	1 1/4 lb.

Available with spring, see page 18.

OBLIQUE CUTTING PLIER

Narrow Nose



Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
202-5	5 1/2	13/16	11/16	7/16	3 3/4 lb.
202-6	6 1/16	13/16	11/16	7/16	4 lb.

Available with spring, see page 18.

OBLIQUE CUTTING PLIER

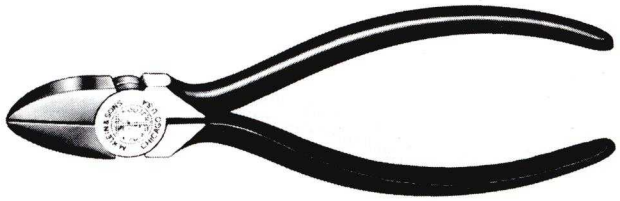
Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
245-5	5	11/16	9/16	3/8	2 3/4 lb.

Available with spring, see page 18.

OBLIQUE CUTTING PLIER

Heavy-Duty Pattern



Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
252-6	6	13/16	3/4	7/16	4 lb.

OBLIQUE CUTTING PLIER

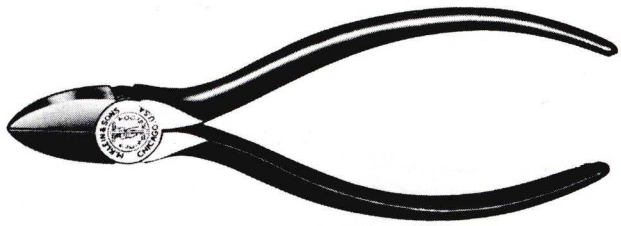
With "W" Stripping Notches

Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
245-5-W	5	11/16	9/16	3/8	2 3/4 lb.

OBLIQUE CUTTING PLIER

Flush Cutting



For cutting small wire or trimming plastic. No bevel on knives so they cut flush against the surface.

Dimensions in inches*

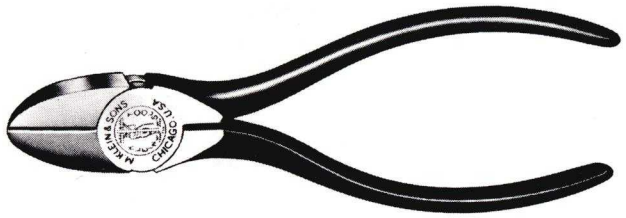
Cat. No.	A	B	C	D	Av. Wt. Per Doz.
210-5	5 1/2	13/16	11/16	7/16	3 1/2 lb.
210-6	6 1/16	13/16	11/16	7/16	3 3/4 lb.

Available with spring, see page 18.

*For dimension drawings of Klein Pliers, see page 20.

OBLIQUE CUTTING PLIER

Heavy-Duty Pattern

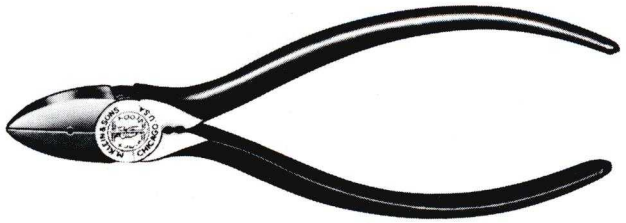


Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
242-6	6	13/16	7/8	1/2	4½ lb.

OBLIQUE CUTTING PLIER

Sleeve Openings and .052" Skinning Hole



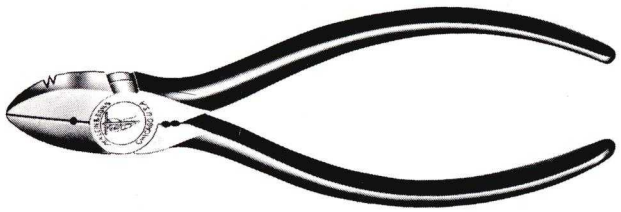
Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
240-5-S	5½	13/16	11/16	7/16	3¾ lb.

OBLIQUE CUTTING PLIER

Bell System Type

With "W" Stripping Notches, Sleeve Openings and .052" Skinning Hole

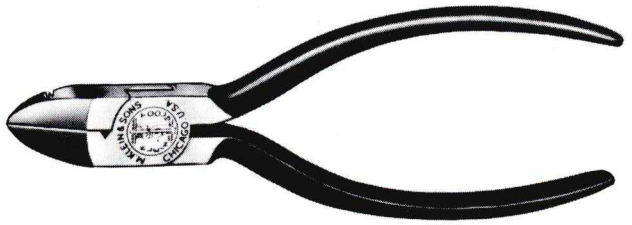


Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
202-5-SW	5½	13/16	11/16	7/16	3¾ lb.
252-6-SW	6	13/16	3/4	7/16	4 lb.

OBLIQUE CUTTING PLIER

Bell System Type "V" Notch Pattern



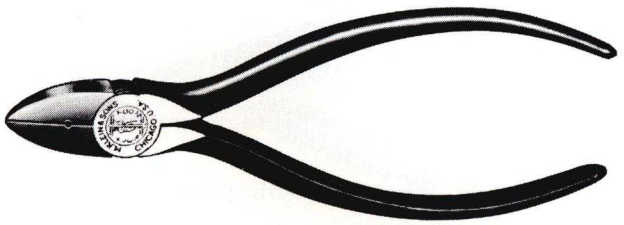
Designed for work on switchboards and amplifiers. "W" notch is provided to slit insulation. "V" notch at hinge to crush insulation.

Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
528-V	5	5/8	9/16	3/8	2½ lb.

OBLIQUE CUTTING PLIER

With .052" Skinning Hole

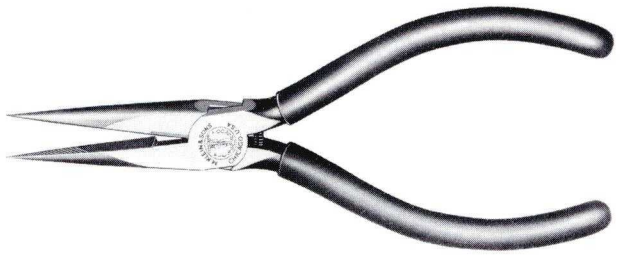


Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
240-5	5½	13/16	11/16	7/16	3¾ lb.
240-6	6 1/16	13/16	11/16	7/16	4 lb.

LONG NEEDLE NOSE PLIER

1/32 in. point



Needle nose point only 1/32 in. diameter. Supplied with coil spring and yellow plastisol handles.

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 221-5½C	5 13/16	1¾	17/32	5/16	7/16	1/32	2½ lb.

LONG NOSE PLIER

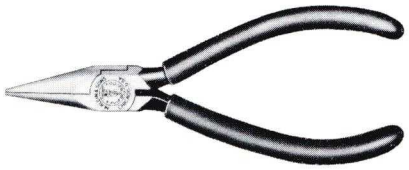
Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
301-5	5 9/16	1 9/16	1 1/16	3/8	3/32	3 lb.
301-6	6 5/8	1 15/16	1 1/16	3/8	3/32	3¾ lb.
301-7	7 1/8	2 7/16	1 1/16	3/8	3/32	4 lb.

Available with spring, see page 18.

LONG NOSE PLIER

Midget Pattern



Plier handles plastisol covered, D 321-4½ with yellow handles. D 322-4½ with blue handles.

Dimensions in inches*

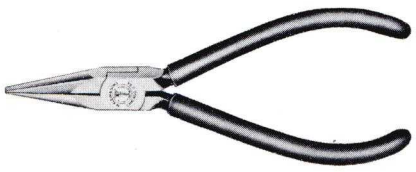
Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 321-4½	4¾	1 1/16	7/16	¼	1/32x1/16	1½ lb.
D 322-4½	4¾	1 1/16	7/16	¼	1/32x1/16	1½ lb.

(Same as 321-4½ but without knurl)

Available with spring, see page 18.

FLAT NOSE PLIER

Midget Pattern



Inside jaws smooth. Plier handles yellow plastisol covered.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 323-4½	4¾	1 1/16	7/16	¼	1/8x1/16	1½ lb.

Available with spring, see page 18.

LONG NOSE SIDE CUTTING PLIER

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
203-5	5 9/16	1 9/16	1 1/16	3/8	1/2	3/32	3 lb.
203-6	6 5/8	1 15/16	1 1/16	3/8	1/2	3/32	3¾ lb.
203-7	7 1/8	2 7/16	1 1/16	3/8	1/2	3/32	4 lb.

Available with spring, see page 18.

LONG NEEDLE NOSE PLIER

Similar to 301 series but with point only 1/16 in diameter.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
303-6	6 5/8	1 15/16	1 1/16	3/8	1/16	3¾ lb.

*For dimension drawings of Klein Pliers, see page 20.

CHAIN NOSE PLIER

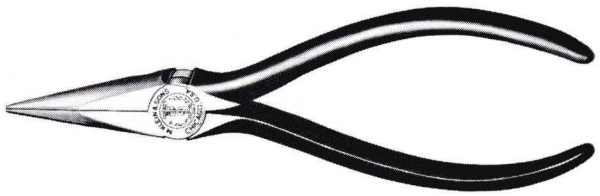
Plier handles yellow plastisol covered.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 317-5	5¼	1⅛	½	5/16	1/16	2¼ lb.

Available with spring, see page 18.

CHAIN NOSE PLIER

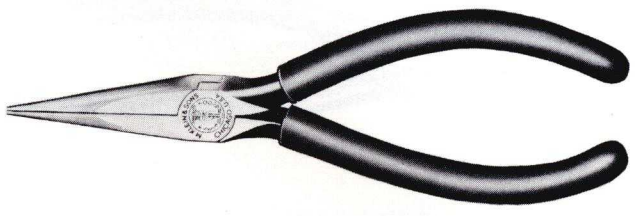


Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
317-6	5 15/16	1 3/16	1 1/16	3/8	....	3/32	3½ lb.
217-6	5 15/16	1 3/16	1 1/16	3/8	½	3/32	3¼ lb.

(with side cutting knives.)

SLIM LONG NOSE PLIER



Plier handles yellow plastisol covered.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 307-5½	5 13/16	1¾	17/32	5/16	....	1/16	2½ lb.

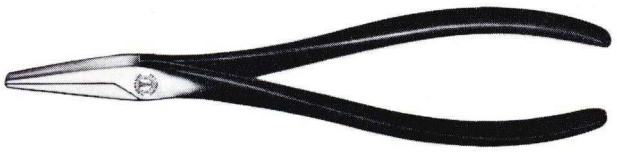
Available with spring, see page 18.

8 in. LONG NOSE PLIER

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
314-8 with knurl	8	1 5/16	9/16	½	3/32	4½ lb.

8 in. DUCK BILL PLIER

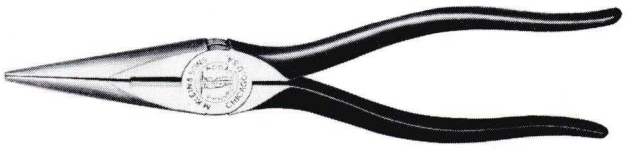


Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
315-8 with knurl	8	1 5/16	9/16	½	3/32 x 17/64	4½ lb.
312-8 without knurl	8	1 5/16	9/16	½	3/32 x 17/64	4½ lb.

LONG NOSE CUTTING PLIER

Heavy-Duty Pattern



"Handform" handle, 203-8N has skinning hole for #12 B & S insulated wire.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
203-8	8 5/16	2 5/16	1	½	5/8	1/8	8 lb.
203-8N	8 5/16	2 5/16	1	½	5/8	1/8	8 lb.

*For dimension drawings of Klein Pliers, see page 20.

NEEDLE NOSE PLIER

Plier handles yellow plastisol covered.

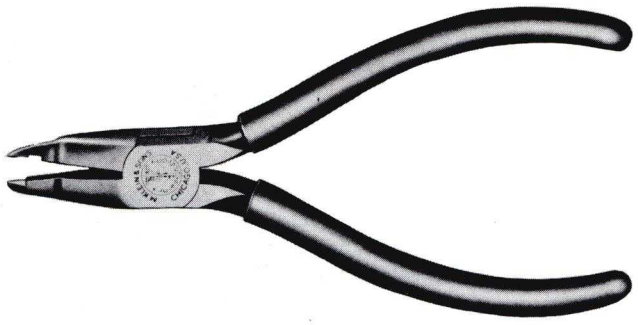
Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 301-6-SCP	6 5/8	1 15/16	1 1/16	3/8	....	1/16	3 1/2 lb.
D 203-6-SCP	6 5/8	1 15/16	1 1/16	3/8	1/2	1/16	3 1/4 lb.

With side cutting knives.

Available with spring, see page 18.

SPECIAL SKINNING PLIER



This plier is specially designed for cutting and skinning 24 gauge synthetic coated wire. A notch in the nose back of the cutting blade crushes insulation. Sharp blade assures a quick, clean cut. Nose tapered to permit access to confined space. Furnished standard red plastisol handles.

Cat. No.	A	B	C	D	E	Av. Wt. Per Doz.
D 317-5P	5 1/4	7/8	1/2	5/16	1/4	2 1/2 lb.

LONG NOSE PLIER WITH KNIFE AT POINT

Plier handles yellow plastisol covered.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 301-6P	6 5/8	1 15/16	1 1/16	3/8	5/16	1/16	4 lb.
*D 317-6PC	6	1 1/4	1 1/16	3/8	5/16	1/16	3 1/4 lb.

*Supplied with coil spring and yellow plastisol handles.

Available with spring, see page 18.

LONG NOSE SIDE CUTTING PLIER

Similar in design to 203 but with two notches designed to strip insulated wire gauge 19 and 22. Designed for telephone switchboard work.

Dimensions in inches*

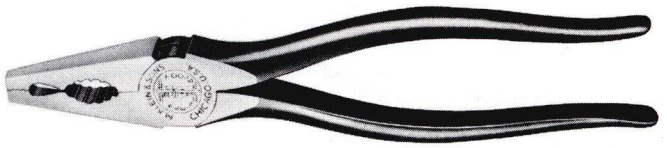
Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
203-6-H2	6 5/8	1 15/16	1 1/16	3/8	1/2	3/32	3 3/4 lb.

CURVED NOSE PLIER

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
302-6	6 1/4	1 1/2	1 1/16	3/8	1 3/4	3/32	3 1/4 lb.

ELECTRICIANS CONDUIT PLIER



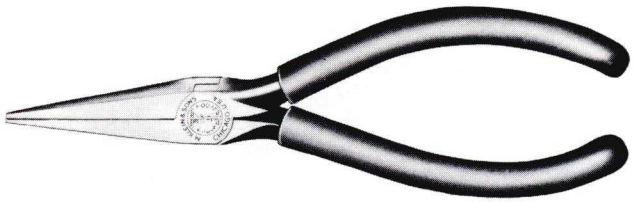
Reams inside and outside of conduit through 1 inch. Designed to tighten lock nuts in outlet boxes.

Dimensions in Inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
333-8	7 3/4	1 5/8	15/16	1/2	3/8	7 lb.

*For dimension drawings of Klein Pliers see page 20.

DUCK BILL PLIER



Inside jaws smooth. Plier handles yellow plastisol covered.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 306-5½	5 13/16	1¾	17/32	5/16	⅛	2¼ lb.

Available with spring, see page 18.

DUCK BILL PLIER

Inside jaws smooth.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
304-6	6½	2 5/16	1 1/16	⅜	....	⅜	3¾ lb.
205-6	6½	2 5/16	1 1/16	⅜	½	⅜	3½ lb.

With side cutting knives.

FLAT NOSE PLIER

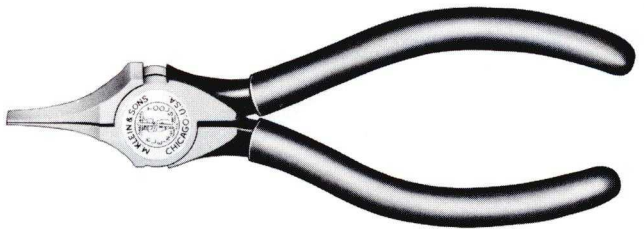
Inside jaws knurled.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
305-6	6½	2 5/16	1 1/16	⅜	....	5/16	3½ lb.
206-6	6½	2 5/16	1 1/16	⅜	½	5/16	3½ lb.

With side cutting knives.

RELAY SPRING ADJUSTING PLIER



Inside jaws smooth. Plier handles yellow plastisol covered.

Dimensions in Inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 325-5	5 1/16	⅞	1 1/16	⅜	5/32 x 1/16	3 lb.

SPRING ADJUSTING PLIER

Inside jaws smooth. Plier handles yellow plastisol covered.

Dimensions in Inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 326-5	5 3/16	1 3/16	1 7/32	5/16	5/32 x 1/16	3¼ lb.

RELAY SPRING ADJUSTING PLIER

Hollow ground on the outside of jaws to reach between and grasp springs easily. Inside jaws are smooth.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
311-5½	5 15/16	1⅝	1 1/16	⅜	9/32 x 1/16	3¼ lb.

*For dimension drawings of Klein Pliers, see page 20.

HEAT-COIL PLIER

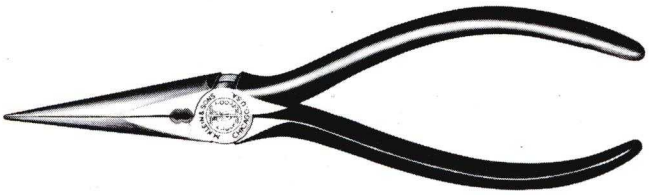
Nose is shaped to fit heat-coils. Also helpful in holding cylindrical object.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
313-6	6	1 13/16	11/16	3/8	11/32	3½ lb.

LONG NOSE SLEEVE PLIER

(Bell System Type)

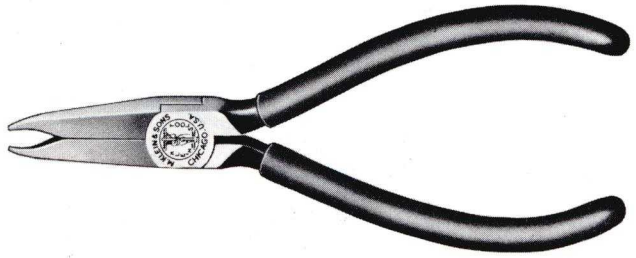


Identical with No. 301-6 but with sleeve opening for twisting No. 17 N. B. S. and smaller copper sleeves.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
316-S	6 5/8	1 15/16	11/16	3/8	½	3/32	3½ lb.

LAMP CAP EXTRACTOR

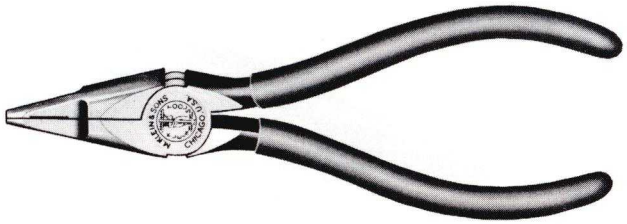


Plier handles yellow plastisol covered. Specially designed long nose plier to extract lamps from switchboards.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 319-B	5¼	1¼	½	5/16	1/32	2½ lb.

LONG NOSE INSULATION SKINNER

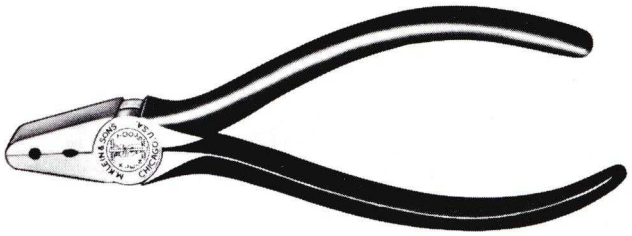


Plier handles yellow plastisol covered.
A special plier for telephone use designed to skin 22 or 24 gauge wire. Will crack insulation in slot provided in nose. Not to be used on plastic-covered wire.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 2291	6	1¼	11/16	3/8	1/16	3½ lb.

CORD-TIP CLOSING PLIER



Sturdy jaws permit using plier as press for closing cord tips such as W. E. new Nos. 120 and 130. Diameter of holes are .129 and .156 in.

Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
039	5 7/16	¾	11/16	3/8	3¼ lb.

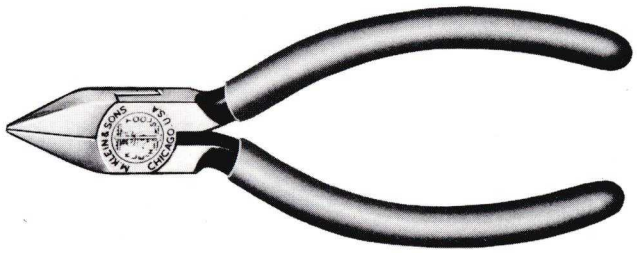
*For dimension drawings of Klein Pliers, see page 20.

SPECIALTY PLIERS FOR ELECTRONICS INDUSTRY

The Electronics Industry has need of many pliers specially designed to meet the requirements of this growing field. On this and the following pages we are showing pliers developed by Klein engineers to serve the highly specialized need of electronics. These pliers are supplied from stock.

OBLIQUE CUTTING PLIER

Lightweight, Pointed Nose
Flush Cutting



D209-4 Plier handles red plastisol covered.

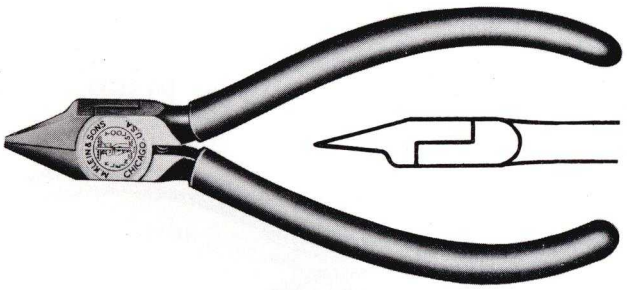
Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
D 209-4	4 3/16	1/2	7/16	1/4	1 lb.
209-5	5	11/16	9/16	3/8	2 3/4 lb.

Available with spring, see page 18.

OBLIQUE CUTTING PLIER

Flush Cutting



Plier handles red plastisol covered.
Similar in design to 209 Series, but relieved in the back to allow entry into extremely confined areas.

Dimensions in inches*

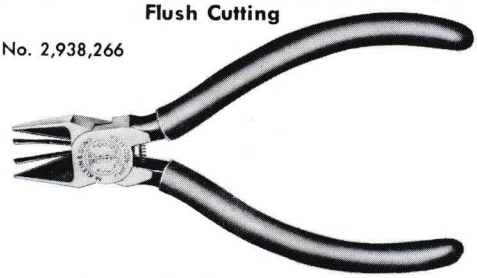
Cat. No.	A	B	C	D	Av. Wt. Per Doz.
D 219-4	4 3/16	1/2	7/16	1/4	1 1/2 lb.
D 219-5	5	5/8	9/16	3/8	2 3/4 lb.

Available with spring, see page 18.

WIRE GRIPPING OBLIQUE CUTTER

Flush Cutting

Patent No. 2,938,266



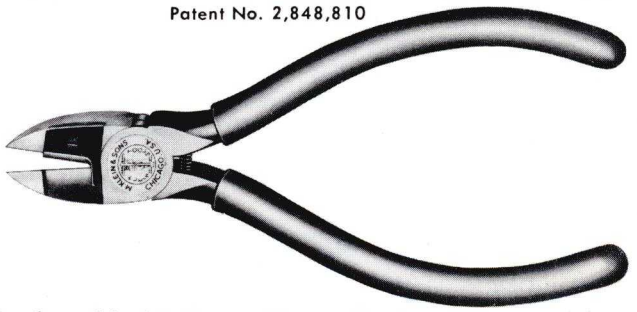
Similar in design to D 209-4 with steel springs placed between jaws to hold clipped end of wire. Supplied with coil spring and red plastisol handles.

Dimensions in Inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
D 229-4C	4 3/16	1/2	7/16	1/4	1 1/4 lb.
D 229-5C	5	11/16	9/16	3/8	2 3/4 lb.

OBLIQUE SHEAR CUTTING PLIER

Patent No. 2,848,810

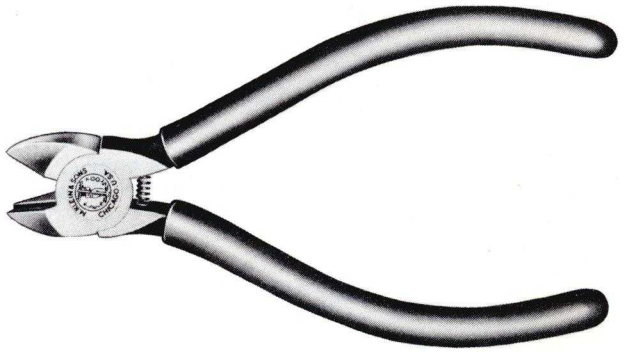


Replaceable blades, will cut dead soft or extremely hard wire. Supplied with coil spring and red plastisol handles.

Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
D 207-5C	5 1/2	13/16	11/16	7/16	3 3/4 lb.
077-K	Replacement Blade				

OBLIQUE CUTTER FOR PRINTED CIRCUITS



Cuts wire on printed circuits and crimps the end in one operation to keep wire in place permitting efficient dip soldering. Supplied with coil spring and red plastisol handles.

Dimensions in inches*

Cat. No.	A	B	C	D	Av. Wt. Per Doz.
D 052-C	5 1/8	7/16	11/16	3/8	3 lb.

*For dimension drawings of Klein Pliers, see page 20.

TRANSVERSE END CUTTING PLIER

Midget Pattern
Semi-Flush Cutting

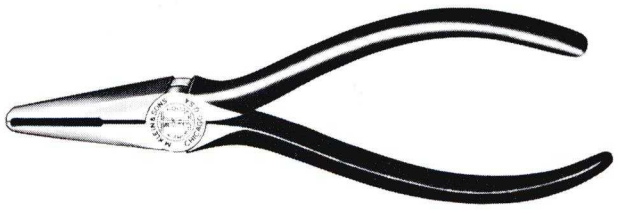
Plier handles green plastisol covered.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 224-4½	4⅝	15/16	7/16	¼	⅛	⅛	1½ lb.

Available with spring, see page 18.

TRANSVERSE END CUTTING PLIER



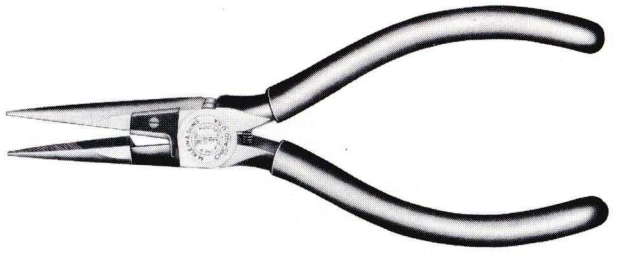
Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
204-6	6¼	1½	1 1/16	⅜	½	5/32	3½ lb.

Available with spring, see page 18.

LONG NOSE SHEAR CUTTING PLIER

Patent No. 2,848,810



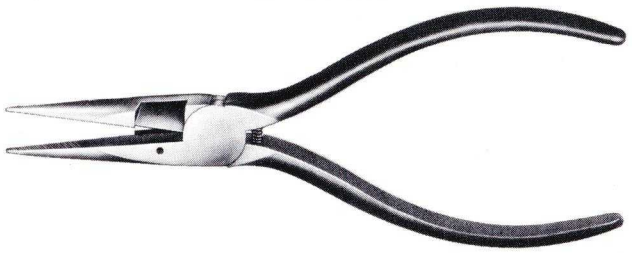
Replaceable blades, will cut dead soft or hard wire. Supplied with coil spring and yellow plastisol handles.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 208-6C	6⅝	1 15/16	1 1/16	⅜	½	1/16	3¾ lb.
078-K	Replaceable Blade						

LONG NOSE SHEAR CUTTING PLIER

Patent No. 2,848,724

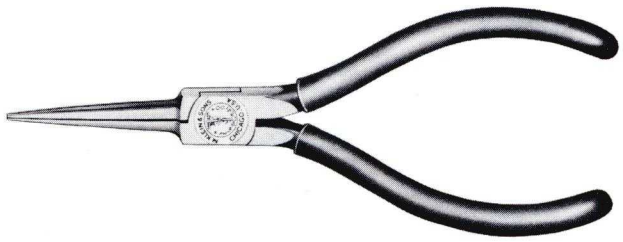


Same as 208-6C shown above but designed to put a positive 3/16 in. hook in the end of resistor wire. Comes with spring to keep jaws open.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
208-6NC	6⅝	1 15/16	1 1/16	⅜	½	1/16	3¾ lb.
078-K	Replaceable Blade						

LONG NEEDLE NOSE PLIER



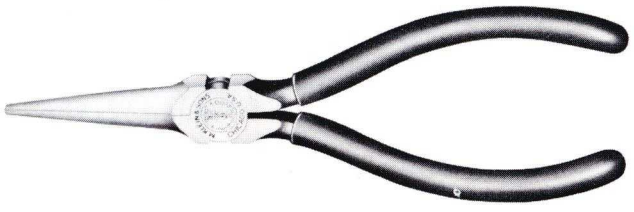
Plier handles yellow plastisol covered.

Dimensions in Inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 318-5½	5 5/32	1¾	½	5/16	1/16	2½ lb.

Available with spring, see page 18.

SLIM LONG NOSE PLIER



Plier handles yellow plastisol covered.

Dimensions in Inches*

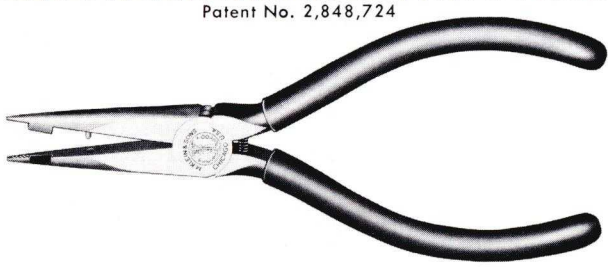
Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 310-6	6⅝	1 15/16	1 1/16	⅜	1/16	3¾ lb.

Available with spring, see page 18.

*For dimension drawings of Klein Pliers, see page 20.

LONG NOSE SHEAR CUTTING PLIER

Patent No. 2,848,724



Shear cutting blade at tip. Jaws behind blade hold clipped end of sheared wire firmly. Pin keeps jaws and cutters in alignment. Supplied with coil springs and yellow plastisol handles.

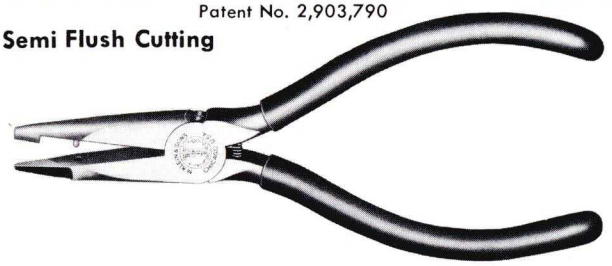
Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 208-6PC	6 5/8	1 15/16	1 1/16	3/8	1/2	1/16	3 3/4 lb.

ALL-PURPOSE ELECTRONIC PLIER

Patent No. 2,903,790

Semi Flush Cutting



Has a shear cutting blade at 15 degree angle (standard angle for diagonal pliers). Cuts flush, steel jaws hold clipped end firmly. Shear cutting principle assures smooth continuous action without snap—prevents shock which may damage delicate components. Pin keeps jaws and cutters in alignment. For use with bare wire 18 gauge and smaller. Supplied with coil spring and yellow plastisol handles.

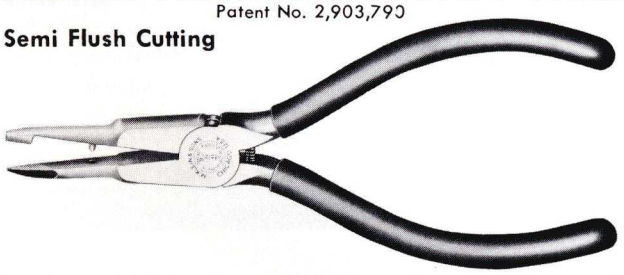
Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 260-6C	6 3/8	1 23/32	1 1/16	3/8	5/16	1/8	3 1/2 lb.

NEEDLE NOSE ELECTRONIC PLIER

Patent No. 2,903,790

Semi Flush Cutting



Similar to D 260-6C shown above, but nose has been ground down to a needle point to permit use in very confined areas. Pin keeps jaws and cutters in alignment. Coil spring and yellow plastisol handles.

Dimensions in inches*

Cat. No.	A	B	C	D	E	F	Av. Wt. Per Doz.
D 261-6C	6 3/8	1 23/32	1 1/16	3/8	5/16	1/8	3 1/4 lb.

END CUTTING TRIMMER PLIER

Flush Cutting

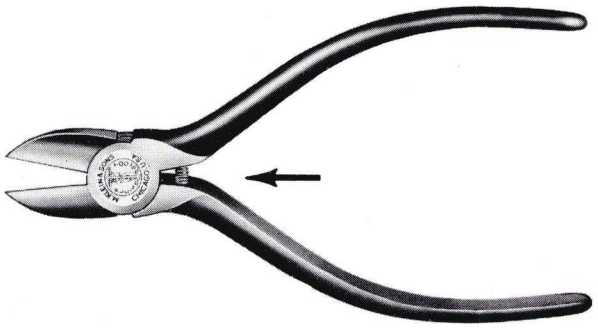
A long nose end cutting plier with cutting edges set at a 45° angle which makes this plier ideal for trimming printed circuit boards. Also valuable in repair of electronic systems. Plier handles are green plastisol covered. Supplied with coil spring.

Dimensions in inches*

Cat. No.	A	B	C	D	F	Av. Wt. Per Doz.
D 211-6C	6 1/2	1 3/4	3/4	3/8	1/8	3 3/4 lb.

*For dimension drawings of Klein Pliers see page 20.

KLEIN PLIERS AVAILABLE WITH COIL SPRINGS



The pliers listed here may be had with plated coil spring to hold jaws in open position. The sturdy spring assures long trouble-free service. Inside of handle is left free of any obstruction and handles may be supplied with dipped-on plastic coating if desired. Add "C" to end of Catalog Number as 203-6C.

LONG NOSE PLIERS

FURNISHED WITH 1/16 IN. PT. EXCEPT WHERE NOTED

Cat. No.	Length	Pliers listed on
D 260-6C 1/8 in. point	6 3/8 in.	Page 17
D 261-6C 1/8 in. point	6 3/8 in.	Page 17
D 211-6C 1/8 in. point	6 1/2 in.	Page 17
D 321-4 1/2 C	4 1/2 in.	Page 10
D 322-4 1/2 C	4 1/2 in.	Page 10
D 323-4 1/2 C 1/8 in. point	4 1/2 in.	Page 10
301-5C	5 in.	Page 10
301-6C	6 in.	Page 10
301-7C	7 in.	Page 10
203-5C	5-in.	Page 10
203-6C	6 in.	Page 10
203-7C	7 in.	Page 10
D 317-5C	5 in.	Page 11
D 307-5 1/2 C	5 1/2 in.	Page 11
D 301-6SCP-C	6 in.	Page 12
D 203-6SCP-C	6 in.	Page 12
D 301-6PC	6 in.	Page 12
D 317-6PC	6 in.	Page 12
D 306-5 1/2 C	6 in.	Page 13
D 224-4 1/2 C 1/8 in. point	4 1/2 in.	Page 16
204-6C 5/32 in. point	6 in.	Page 16
D 318-5 1/2 C	5 1/2 in.	Page 16
D 310-6C	6 in.	Page 16
D 221-5 1/2 C 1/32 in. point	5 13/16 in.	Page 10
D 208-6PC	6 5/8 in.	Page 17
208-6NC	6 5/8 in.	Page 16
D 208-6C	6 5/8 in.	Page 16

OBLIQUE CUTTING PLIERS

D 257-4C	4 in.	Page 8
245-5C	5 in.	Page 8
202-5C	5 in.	Page 8
202-6C	6 in.	Page 8
210-5C	5 in.	Page 8
210-6C	6 in.	Page 8
D 209-4C	4 in.	Page 15
209-5C	5 in.	Page 15
D 219-4C	4 in.	Page 15
D 219-5C	5 in.	Page 15
D 229-4C	4 3/16 in.	Page 15
D 229-5C	5 in.	Page 15
D 207-5C	5 1/2 in.	Page 15
D 052-C	5 1/8 in.	Page 15

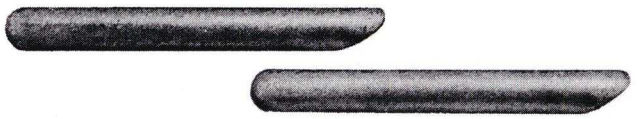
"KLEIN-KOAT" TENITE HANDLES

Provides non-skid grip and greater comfort. Made of transparent "Tenite" plastic in bright maroon. Does away with taping handles.

Cat. No.	Size	Av. Wt. Per Doz.
60	To fit 6-in. pliers	3/4 lb.
70	To fit 7-in. pliers	1 1/4 lb.
89	To fit 8-in. or 9-in. pliers	1 1/4 lb.

COMFORT GRIP HANDLES

Resilient Aerated Plastic



A new and exclusive Klein designed plier handle made of aerated plastic material to provide a firm but resilient cushion. Safety grip surface does not permit slipping even when hands are wet. Color red only.

Cat. No.	Size	Av. Wt. Per Doz.
55	to fit 5" through 6 1/2" pliers	3/4 lb.

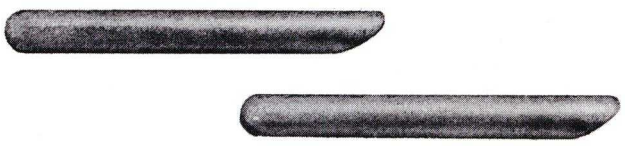
DIPPED PLASTIC HANDLES

If you desire to have the pliers you order supplied with plastic handles, please indicate on your order as follows. Prefix "D" before the catalog number as D 203-6. Plastisol is applied to plier handles assuring a tight fit, no twisting.

Pliers with dipped handles are only furnished in following colors.

Diagonal Pliers—Red
End Cutting Pliers—Green
Long Nose Pliers—Yellow
Side Cutting Pliers—Blue

SLIP-ON HANDLES



Slip-On plastic handles. Colors red, yellow, green and blue. Minimum order 12 pr. of each size.

Cat. No.	
34	To fit 4"-4 1/2" pliers
35	To fit 5"-5 1/2" pliers
36	To fit 6"-6 1/2" pliers
46	36 pr. assorted sizes and colors.

SPECIAL FEATURES AVAILABLE ON KLEIN PLIERS

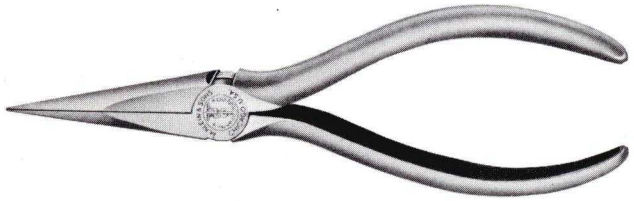
FINISHES

Fully Polished Finish

Klein Pliers may be furnished fully polished standard 120 grit finish. Prefix "FP" before catalog number. Example: FP 203-6. Minimum order 12 pairs.

High-Gloss Finish

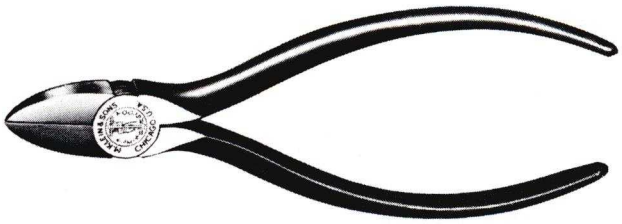
Klein Pliers may be furnished with a fully polished high-gloss, buffed finish. Buffing is performed over 300 grit finish to assure a high luster, resembling buffed chrome plate finish. Prefix "HG" before catalog number. Example: HG 203-6. Minimum order 12 pairs.



Chrome-Plated Finish

Klein Pliers may be furnished with chrome plate over standard finish. This produces a Satin appearance. For High Gloss to Nickel Chrome finish, prefix HGNC before catalog number. Example: HGNC 203-6. Minimum order 12 pairs.

FLUSH CUTTING



Klein Diagonal Pliers may be furnished without top bevel on knife for flush cutting. Prefix "FC" before catalog number. Example: FC 245-5.

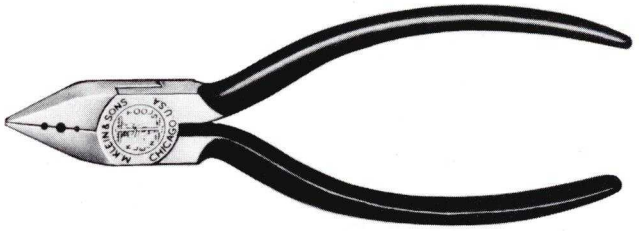
SPECIAL POINT

Long Nose Pliers are furnished with 1/32-inch point at slight extra charge. Specify "1/32″ point" when ordering. Example: 203-6C 1/32″ point.

METER SEALING FEATURE

Where desired a meter sealing feature can be added to a wide variety of Klein Pliers. Write for further information.

SKINNING HOLES

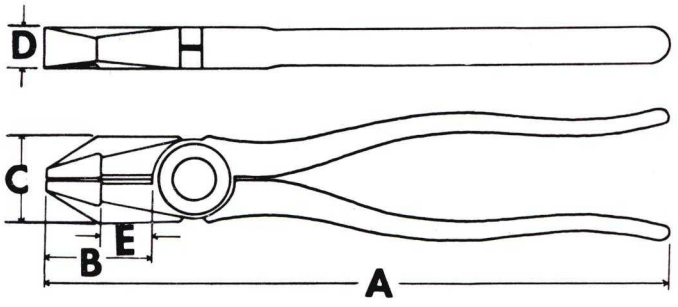


In pliers having cutting knives, skinning holes may be had to order. Holes are brought to a sharp edge through countersinking, assuring clean removal of any insulation. 1, 2 or 3 holes of various sizes may be placed into each plier. Illustrated is the 209-5 with stripping holes for 19 gauge, 22 gauge and 24 gauge wire. Prices on application.

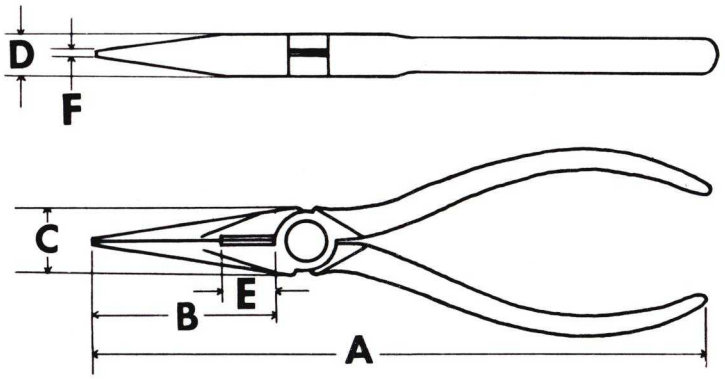
DIMENSIONS OF KLEIN PLIERS

Below are shown drawings of Klein Pliers. These will serve as a key to show the dimensions of any pliers shown on pages 6 through 13. All dimensions subject to commercial tolerances.

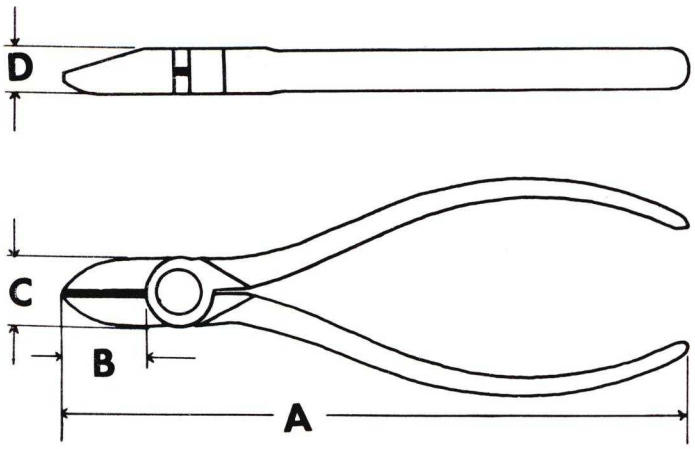
SIDE CUTTING PLIER



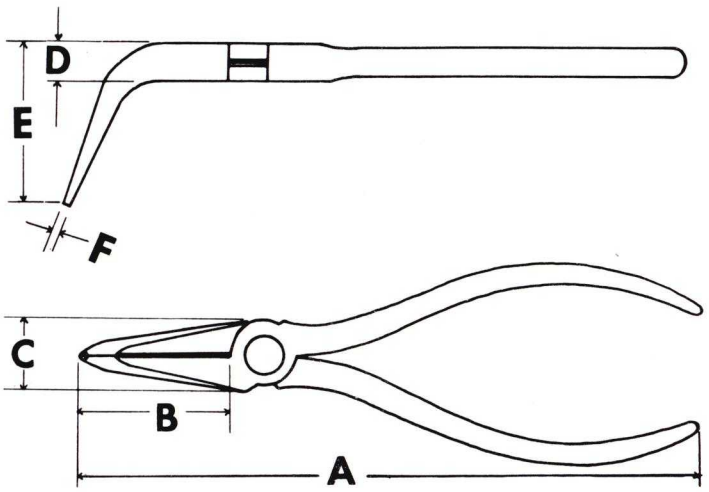
CHAIN AND LONG NOSE PLIER



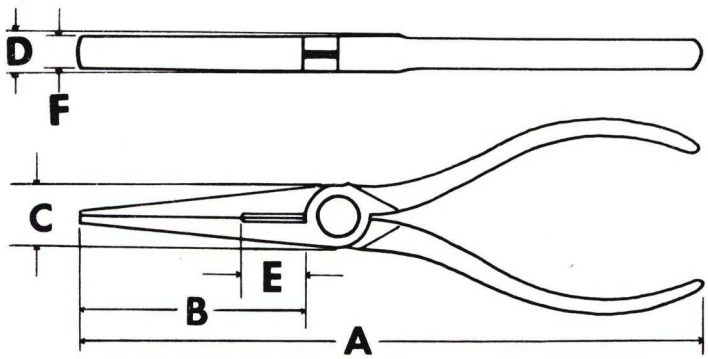
OBLIQUE CUTTING PLIER



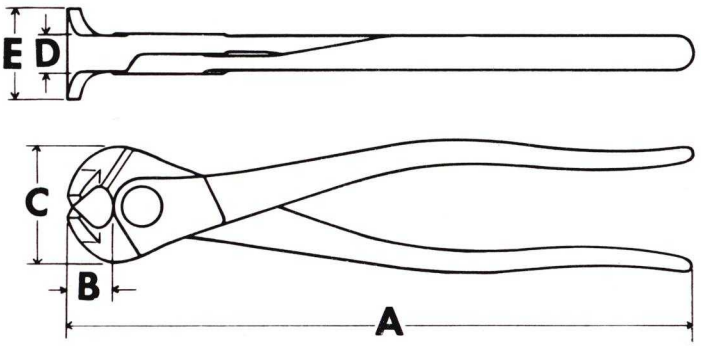
CURVED NOSE PLIER



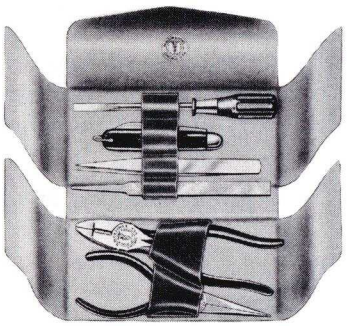
FLAT AND DUCK BILL PLIER



END CUTTING PLIER



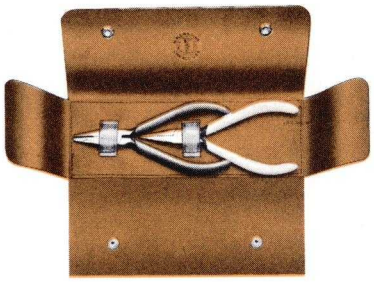
POCKET TOOL KITS



Genuine black leather folding case containing following tools:

- 1 No. 201-6 N E Side Cutting Plier
- 1 No. 301-6 Long Nose Plier
- 1 No. 1550-2 "Xela" Electrician's Knife
- 1 5-in. Electrician's Tweezers
- 1 4-in. File and Handle
- 1 Insulated Screw Driver (3-in. blade)

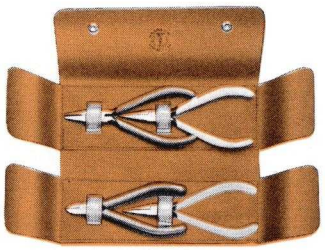
Cat. No.	Size Closed	Weight Each
1305-2	6½ x 3½ x 1½	1¼ lb.



A compact lightweight plier kit which holds the two most important pliers for wiring, repair and maintenance. Case is of finest leatherette with two snaps. Color, brown. Contains the following tools:

- 1 D 321-4½ Long Nose Plier
- 1 D 257-4 Oblique Cutting Plier

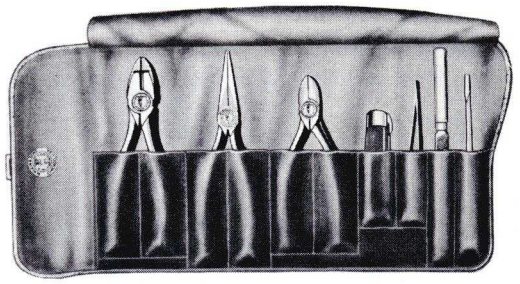
Cat. No.	Size Closed	Weight Each
1305-5	7 x 2½ x ½"	½ lb.



A handy kit that fits the pocket and holds your midget Klein pliers, long nose, end cutting, oblique cutting and duck bill. Case is of top grade leatherette with two snaps. Contains following tools:

- 1 No. D257-4 Oblique Cutting Plier
- 1 No. D224-4½ End Cutting Plier
- 1 No. D321-4½ Long Nose Plier
- 1 No. D323-4½ Duck Bill Plier

Cat. No.	Size Closed	Weight Each
1305-4	7 x 2¾ x 1	¾ lb.



Handy kit for electricians and servicemen. Top-quality leatherette roll with strap and buckle. Contains following tools:

- 1 No. 201-6 N E Side Cutting Plier
- 1 No. 301-6 Long Nose Plier
- 1 No. 202-5 Oblique Cutting Plier
- 1 No. 1550-2 Electrician's Knife
- 1 4-in. File and Handle
- 1 5-in. Electrician's Tweezers
- 1 Insulated Screw Driver (3-in. blade)

Cat. No.	Weight Each
1305-33A	1½ lb.

KLEIN ADJUSTABLE WRENCHES

Drop forged alloy steel for maximum strength and lighter weight. Chrome plated. Packed 6 to a box.

Prefix "D" below indicates wrenches furnished from stock with red dipped plastic handles.

Cat. No.	Size	Capacity	Av. Wt. Per Doz.
500-4	4″	½″	2½ lb.
D 500-4	4″	½″	2½ lb.
500-6	6″	¾″	3 lb.
D 500-6	6″	¾″	4 lb.
500-8	8″	15/16″	6 lb.
D 500-8	8″	15/16″	7½ lb.
500-10	10″	1⅛″	9½ lb.
D 500-10	10″	1⅛″	11 lb.
500-12	12″	1 5/16″	18 lb.
D 500-12	12″	1 5/16″	20 lb.
*D500-12L	12″	1½″	20 lb.
500-15	15″	1 11/16″	45 lb.
D 500-15	15″	1 11/16″	45 lb.

*Developed for linemen extra large capacity with locking feature.

WRENCH PARTS KITS

Parts for Klein Adjustable Wrenches are supplied in a kit. Each kit contains the parts listed, packed in a sturdy carton which is divided into compartments.

Cat. No.	Wt. Each
WP-1	1⅞ lb.

Contains Following Parts

Part	Quantity	Part	Quantity
6″ Jaws	5	6″ Knurls	3
8″ Jaws	4	8″ Knurls	4
10″ Jaws	2	10″ Knurls	2
12″ Jaws	1	12″ Knurls	1
6″ Pins	3	6″ Springs	3
8″ Pins	3	8″ Springs	3
10″ Pins	2	10″ Springs	2
12″ Pins	1	12″ Springs	1

WRENCH REPAIR PARTS

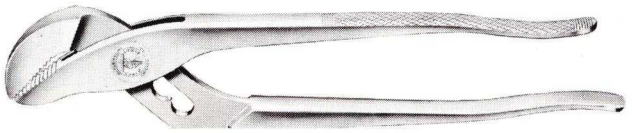
Jaw

Knurl

Pin & Spring

JAWS		KNURLS		PINS & SPRINGS	
Cat. No.	Size	Cat. No.	Size	Cat. No.	Size
14J	4″	14K	4″	14PS	4″
16J	6″	16K	6″	16PS	6″
18J	8″	18K	8″	18PS	8″
110J	10″	110K	10″	110PS	10″
112J	12″	112K	12″	112PS	12″
115J	15″	115K	15″	115PS	15″

KLEIN PUMP PLIER



One-hand operation. Capacity slightly over 2 inches. Firm grip in any of the four positions is secured.

Due to unique construction of adjusting rivet, plier cannot slip accidentally from one position to another. Handles knurled for positive grip. Zinc plated for rust resistance.

Can be had with plastic handles. Specify D before number.

Cat. No.	Length	Thickness	Av. Wt. Per Doz.
510	9½″	½″	9½ lb.
D 510	9½″	½″	10½ lb.

KLEIN SPECIAL DISPLAY BOARDS

Standard sizes available are 18″ x 28″, 24″ x 36″, 48″ x 48″, special sizes are available upon request.

Boards may be covered in leatherette with any of following colors: Tan, Grey, Blue, Maroon, Orange.

The only charge made is the actual cost of tools. Self service boards are available, features same as above.

NEW

KLEIN PUMP PLIER

This newly introduced Klein Pump Plier offers many advantages. The jaws are positioned and locked into place for the desired size opening by engaging a tongue in the proper groove. Wide bearing surface assures a solid, firm grip . . . jaws cannot slip even under heavy pressure. Sides are polished and handles are blued. Available with and without yellow plastic handles as indicated below. D502-16 has 11 grooves to provide maximum coverage and is furnished standard with yellow plastic handles only.

Cat. No.	Length	Max. Cap.	Av. Wt. Per Doz.
502-10	10 in.	1½ in.	9½ lb.
D502-10 yellow handles	10 in.	1½ in.	9½ lb.
502-12	12 in.	2⅛ in.	17⅜ lb.
D502-12 yellow handles	12 in.	2⅛ in.	17⅜ lb.
D502-16 yellow handles	16 in.	4¼ in.	29¼ lb.

KLEIN "Custom" Cushion Grip

Patent No. 2871899

THE FINEST SCREWDRIVER MADE

This new line of Klein screwdrivers is designed for electricians and mechanics who want something better than the usual commercial screwdriver. Exceptionally strong, made of alloy tool steel carefully heat-treated. Full chrome-plated finish to prevent rust. The amber plastic handle is shockproof and nonflammable, and is firmly secured to the steel shaft. Every Klein "Custom" Cushion Grip screwdriver is fully guaranteed.

Cross section shows slotted amber handle and interlocking ribbed sleeve of genuine Nitrile rubber.

- **Hardened alloy tool steel**
- **Fully chrome-plated finish**
- **Precision cross-ground point**
- **Bolstered heavy-duty blade—winged shaft**
- **Clear amber handle firmly secured to the shaft**
- **Rubber grip resistant to oil, gas, water**
- **Hammerproof, shockproof, nonflammable**
- **50% greater torque**
- **Super comfortable cushioning action never hurts the hand**

KLEIN "CUSTOM" CUSHION GRIP SCREWDRIVERS

HEAVY-DUTY SQUARE SHANK

Cat. No.	Blade	Wt. per Doz.
600-4	4 x 1/4 in.	3 lbs.
600-6	6 x 5/16 in.	5 1/4 lbs.
600-8	8 x 3/8 in.	7 3/4 lbs.

HEAVY-DUTY ROUND SHANK

Cat. No.	Blade	Wt. per Doz.
602-3	3 x 3/16 in.	2 lbs.
602-4	4 x 1/4 in.	2 3/4 lbs.
602-6	6 x 5/16 in.	4 3/4 lbs.
602-8	8 x 3/8 in.	6 3/4 lbs.

ELECTRICIANS AND TELEPHONE ROUND SHANK

Cat. No.	Blade	Wt. per Doz.
601-3	3 x 3/16 in.	1 3/4 lbs.
601-6	6 x 3/16 in.	2 lbs.
601-8	8 x 3/16 in.	2 1/4 lbs.
601-10	10 x 3/16 in.	2 1/2 lbs.

SUPER-HARD PHILLIPS

Cat. No.	Blade	Wt. per Doz.
603-3 #1 point	3 x 3/16 in.	1 3/4 lbs.
603-4 #2 point	4 x 1/4 in.	2 3/4 lbs.

PLASTIC HANDLE SCREWDRIVER (WITHOUT CUSHION GRIP)

Cat. No.	Blade	Wt. per Doz.
604-3	3 x 3/16 in.	1 1/2 lbs.

No. 613 display assortment includes three each of the above screwdrivers in self service rack. Weight complete 22 lb.

KLEIN SPLICING CLAMPS

Klein Splicing Clamps are properly proportioned and designed to give years of satisfactory service. A single hand tool accommodates a wide range of sleeve and wire sizes.

SPLICING CLAMPS

DISCONTINUED

Has five holes. For bare wire. Handles copper wire Nos. 8, 10, 12, 14, 16, B & S. Iron wire Nos. 10, 12, 14, 16, 18, B.W.G.

Cat. No.	Size	Av. Wt. Per Doz.
102-1	8 in.	5 ¾ lb.

Has five round holes and one oval hole. For bare wire. Handles copper wire Nos. 2, 4, 6, 8, 10, 12, B. & S. Iron wire Nos. 4, 6, 8, 10, 12, 14, B. W. G.

Cat. No.	Size	Av. Wt. Per Doz.
102-30	10 ¾ in.	16 ¾ lb.

DISCONTINUED

Has five holes. For bare copper wire. Handles copper wire Nos. 0, 2, 4, 6, 8, B. & S.

Cat. No.	Size	Av. Wt. Per Doz.
102-48	10 ¾ in.	16 ¼ lb.

DISCONTINUED

Has four sets of chambers. For twisting double tube sleeves. Handles copper sleeve Nos. 8, 10, 12, 14, 17, B. & S. Iron sleeve Nos. 10, 12, 14, 16, 19, B. W. G.

Cat. No.	Size	Av. Wt. Per Doz.
105-15	8 in.	5 ¾ lb.

DISCONTINUED

Has five sets of chambers. For twisting double tube sleeves. Handles copper sleeves Nos. 6, 8, 10, 12, 14, B. & S. Copper sleeves Nos. 12, 14, 17, N. B. S. Iron sleeves Nos. 8, 10, 12, 14, 16, 19, B. W. G.

Cat. No.	Size	Av. Wt. Per Doz.
105-17	10 ¾ in.	17 lb.

DISCONTINUED

Has three special chambers for twisting single tube or oval (Memco) sleeves Nos. 2, 4 and 6. Also an oval (hog) hole .437 x .624 for guy strand.

Chambers are a modified figure 8 giving a secure hold which prevents burning the sleeves when the joint is twisted. Spring latch holds handle firm even when used on larger sleeves.

Cat. No.	Size	Av. Wt. Per Doz.
132-74	11½ in.	16 lb.

COMBINATION WIRE AND SLEEVE CLAMPS

Has five round holes for bare wire, one oval hole for guy strand. Reverse side has five chambers for double tube sleeves.

Handles: Copper wire Nos. 4, 6, 8, 10, 12, B. & S.
Iron wire Nos. 6, 8, 10, 12, 14, B. W. G.
Oval hole .437 x .624
Copper sleeves Nos. 6, 8, 10, 12, 14, 17, B. & S.
Iron sleeves Nos. 8, 10, 12, 14, 16, 19, B.W.G.

Cat. No.	Size	Av. Wt. Per Doz.
132-15	11 ¼ in.	18 lb.

Has five round holes for bare wire, one oval hole for guy strand. Reverse side has five chambers for double tube sleeves.

Handles: Copper wire Nos. 4, 6, 8, 10, 12, B. & S.
Iron wire Nos. 6, 8, 10, 12, 14, B. W. G.
Oval hole .437 x .624
Copper sleeves Nos. 4, 6, 8, 10, 12, B. & S.
Iron sleeves Nos. 6, 8, 10, 12, 14, B. W. G.

Cat. No.	Size	Av. Wt. Per Doz.
132-46	11 ¼ in.	17 ¾ lb.

KLEIN CLIMBERS

Safety and comfort are vital in the design of any climber. Back of Klein Climbers is a century of experience and manufacturing know-how. These climbers are drop forged from selected electric furnace steel and are individually tempered and tested. The gaff is drop forged from electric furnace alloy tool steel and is set into the leg iron at the proper angle. Carefully tempered for maximum safety.

For maximum life, leg irons are fully polished in critical sections before aluminum finish is applied.

Klein Climbers are available in adjustable pattern (pages 28 & 30) or in fixed-length pattern (page 31). In the adjustable patterns a tubular sleeve telescopes over the leg iron and is secured to the climber shank with two steel pins and locked with special keys. The adjustable feature assures the correct size for every lineman without the need of stocking many sizes. Klein "Pole Master" Climbers give better support to the arch of the foot and are made in matched pairs —one for the right leg and one for the left. New design drop forged triangle strap rings keep straps smooth, prevent chafing and excessive wear on leather or fabric straps.

Bulletin 458 illustrates many of the manufacturing operations in producing Klein climbers.

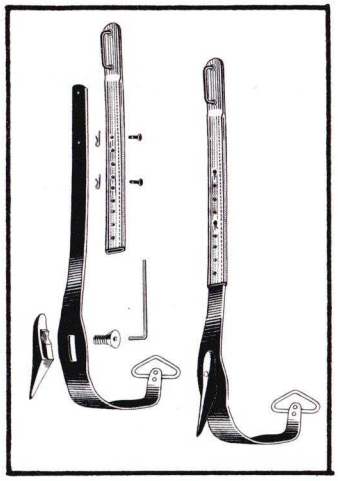
Bulletin 154 illustrates and explains proper method of sharpening climber gaffs and includes the "plane test."

Copies of both are available on request.

REPLACEABLE GAFF ADJUSTABLE CLIMBERS

Catalog No. 1958-AR

Catalog No. 1959-AR



ADVANTAGES OF KLEIN REPLACEABLE GAFF ADJUSTABLE CLIMBERS

- Leg irons drop-forged from select electric furnace steel individually heat-treated and tested.
- Replaceable gaffs are drop-forged from electric furnace alloy tool steel, individually heat-treated and tested.
- Gaffs 1⅝ inches long measured on underside.
- Special screw with locking nylon insert anchors gaff firmly in position.
- Screw does not absorb any load when climber is in use.
- Leg irons fully polished in the critical section before finishing.
- Tilted stirrup provides maximum comfort.
- Extra clearance in stirrup adds comfort by firmly supporting entire width of arch.
- Heat-treated strap attachments assure maximum wear.

Klein replaceable gaff adjustable climbers have been developed to meet the demand for such a type of climber that assures maximum quality and safety, which are associated with the name of Klein. For maximum safety, we recommend the leg iron be replaced after three sets of gaffs have been used.

The easily replaceable gaff is held in position by a self-locking screw. The full impact when using the climber is absorbed by the gaff and leg iron. No load is absorbed by the self-locking screw.

These climbers are adjustable to 14½, 15, 15½, 16, 16½, 17, 17½, 18, 18½ and 19 inches measured from the instep to the top of the slide. Made in matched pairs, right and left. Wide stirrup gives full support. Offset shank brings gaff in proper line with the leg bone, assuring greater security and comfort. Aluminum finish. Every climber individually tested.

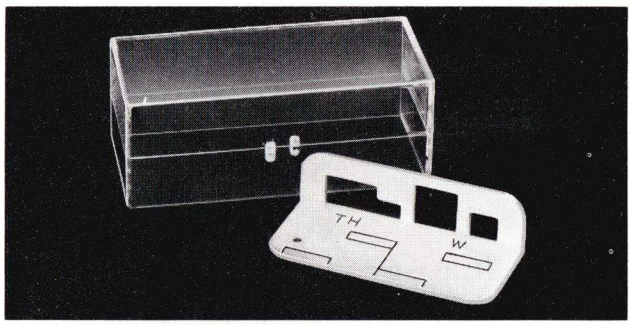
These Klein replaceable gaff adjustable climbers are available with riveted top loop and forged triangular ring at ankle, or with riveted top loop and riveted ankle loop.

Cat. No.		Av. Wt. Per Pair
1958-AR	With riveted ankle loop	3½ lb.
C1958-AR	As above, but complete with straps and pads	4 lb.
	Furnished with No. 5301-9 calf straps, No. 5301-10 ankle straps and No. 8207 climber pads.	
1959-AR	Triangular ring at ankle	3½ lb.
C1959-AR	As above, but complete with straps and pads	4 lb.
	Furnished with No. 5301-9 calf straps, No. 5301-26 ankle straps and No. 8207 climber pads.	

REPLACEABLE GAFFS

Replaceable gaffs are supplied complete with lock screw and wrench.

Cat. No.	Av. Wt. Per Pair
59	1/2 lb.



KLEIN GAFF GAUGE

The Klein Gaff Gauge made of steel, rustproof for long life, will assure you of properly sharpened gaffs at all times and obviate the hazards due to dull or incorrectly prepared gaffs. Comes in a hinged plastic box complete with instructions.

Cat. No.	Av. Wt. Per Doz.
KG-1	1 3/8 lb.

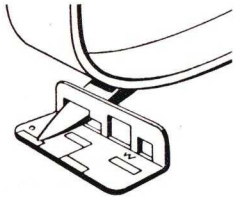


Illustration A

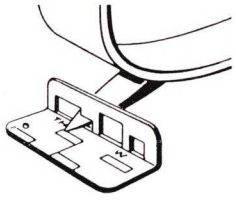


Illustration B

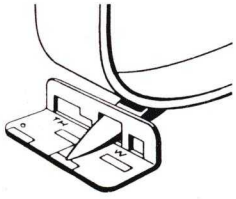


Illustration C

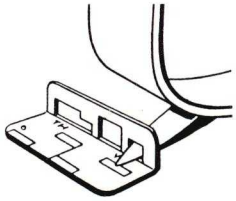


Illustration D

PROPER USE OF KLEIN GAFF GAUGE

Check for Thickness

A. Insert gaff as far as possible through large slot in section marked "TH." The point of the gaff should fall within the limits formed by the last line and the edge of the gauge as illustrated. This assures the proper thickness of the gaff approximately 1 in. from the point.

B. Insert gaff as far as possible through small slot in section marked "TH." The point should fall within the center two lines as illustrated. This assures the proper thickness of the gaff 1/2 in. from the point.

E. Insert point of gaff in small round hole. Point of gaff should be flush with opposite face.

Check for Width

C. Insert gaff as far as possible through large square hole in Section "W." The point should fall within the limits formed by the last line and the edge of the gauge as illustrated. This assures proper width of the gaff approximately 1 in. from the point.

D. Insert gaff as far as possible through small hole in Section "W." The point should fall within the limits formed by the center two lines as illustrated. This assures proper width of the gaff approximately 1/2 in. from the point.

F. Center line on gauge indicates minimum safe length (1-1/4 in.) of gaff measured on underside.

INSTRUCTIONS FOR SHARPENING GAFFS

Side View

Incorrect

Correct

1. Always use sharp, smooth file. Never grind to a point on any kind of wheel as this is apt to spoil the temper and make gaff dangerous to use.
2. Set climber in a vise with gaff uppermost so that you can file from heel to point of gaff. File toward the point and down to the edges of the underside of the gaff. Remove only sufficient material to make a good point.
3. Do not file to a needle-point. File both side slopes to even, rounded surfaces. The top ridge of the gaff must be perfectly straight and should not be touched unless necessary. The final point is always in the top ridge of the gaff.
4. The underside of the gaff should be left perfectly straight to within 1/4-in. of the point, then rounded slightly toward the top ridge of the gaff on a radius of 1/4-in. At a distance of 1/16-in. back from the point the width should be approximately 3/32-in. measured on the underside of the gaff. The remainder of the underside of the gaff should be straight.
5. If worn gaffs are to be replaced, the climbers should be sent to the factory. It is poor practice to continue using climbers after gaffs are worn to less than 1-1/4 in. measured on the underside.
6. CAUTION—Never attempt to grind or retemper gaffs. This is dangerous and we cannot consider any claim for replacement on misused climbers.

Front View

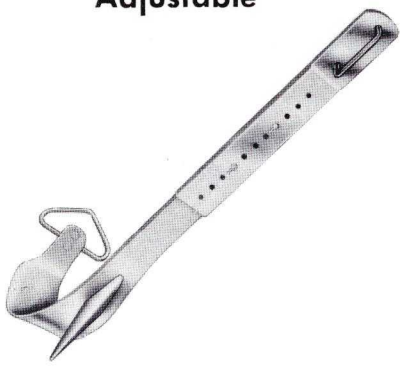
Incorrect

Correct

Reprints of these instructions available on request. Write for Bulletin 154.

"POLE MASTER" CLIMBERS

Adjustable



Made in matched pairs right and left. Wide stirrup gives better support. Offset shank brings gaff in proper line with leg bone to provide greater security and comfort. Riveted top loop, drop forged triangular ring at ankle. Adjustable to 14-1/2, 15, 15-1/2, 16, 16-1/2, 17, 17-1/2, 18, 18-1/2 and 19 inches measured from instep to top of slide. Gaff 3-inches long measured on the outside and 1-13/16 inches on underside. Aluminum finish. Every climber individually tested.

For ankle straps and pads, see pages 44 and 45.

Cat. No.	Av. Wt. Per Pair
1945-A	3-1/4 lb.
*C1945-A complete with straps and pads	3-3/4 lb.
1945-AL adjustable 17"—20"	3-1/4 lb.

*Furnished with No. 5301-9 calf straps, 5301-26 ankle straps and 8207 climber pads.

STANDARD CLIMBERS

Adjustable

The Klein Pattern Climber that has been accepted as standard by utilities for many years. Adjustable to 14-1/2, 15, 15-1/2, 16, 16-1/2, 17, 17-1/2, 18, 18-1/2 and 19 inches measured from the instep to the top of slide. Gaff 3-inches long measured on the outside and 1-13/16 inches on underside. Riveted strap loops. Aluminum finish. Every climber individually tested.

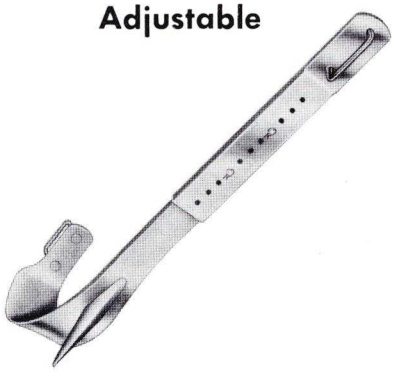
For ankle straps and pads, see pages 44 and 45.

Cat. No.	Av. Wt. Per Pair
1901-M-A	3-3/4 lb.
*C1901-M-A complete with straps and pads	4-1/4 lb.
1901-M-AL adjustable 17"—20"	3-3/4 lb.

*Furnished with No. 5301-9 calf straps, 5301-10 ankle straps and 8207 climber pads.

RIVETED LOOP "POLE MASTER" CLIMBERS

Adjustable



This climber is the same as 1945-A except that a riveted loop is provided to carry the ankle strap in place of a triangular ring. Adjustable to 14-1/2, 15, 15-1/2, 16, 16-1/2, 17, 17-1/2, 18, 18-1/2 and 19 inches measured from instep to top of slide. Gaff 3-inches long measured on the outside and 1-13/16 inches on underside. Aluminum finish. Every climber individually tested.

For ankle straps and pads, see pages 44 and 45.

Cat. No.	Av. Wt. Per Pair
1957-A	3-1/4 lb.
*C1957-A complete with straps and pads	3-3/4 lb.
1957-AL adjustable 17"—20"	3-1/4 lb.

*Furnished with No. 5301-9 calf straps, 5301-10 ankle straps and 8207 climber pads.

TRIANGULAR RING-- STANDARD PATTERN

Adjustable

This climber is the same in design as the standard climber 1901-MA except that a drop forged triangular ring carries the ankle strap. Adjustable to 14-1/2, 15, 15-1/2, 16, 16-1/2, 17, 17-1/2, 18, 18-1/2 and 19 inches measured from the instep to top of slide. Gaff 3-inches long measured on the outside and 1-13/16 inches on underside. Aluminum finish. Every climber individually tested.

For ankle straps and pads, see pages 44 and 45.

Cat. No.	Av. Wt. Per Pair
1956-A	3-3/4 lb.
*C1956-A complete with straps and pads	4-1/4 lb.
1956-AL adjustable 17"—20"	3-3/4 lb.

*Furnished with No. 5301-9 calf straps, 5301-26 ankle straps and 8207 climber pads.

NOTE: When leather ankle straps No. 5301-16 or 5301-26 or Nylon 5301-20 or 5301-23 are desired attached at the factory, please specify on your order.

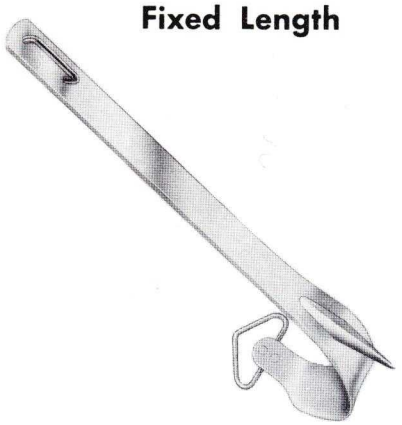
STANDARD CLIMBER--
Fixed Length

This climber is the standard pattern that has been used by utilities for many years. Fixed length pattern in following sizes: 15, 15-1/2, 16, 16-1/2, 17, 17-1/2 and 18 inches measured from instep to end of shank. Special sizes to order. Strap loops are riveted. Aluminum finish. Every climber individually tested.

For straps and pads see pages 44 and 45.

Cat. No.	Av. Wt. Per Pair
1901-M	3-3/8 lb.

"POLE MASTER" CLIMBERS
Fixed Length

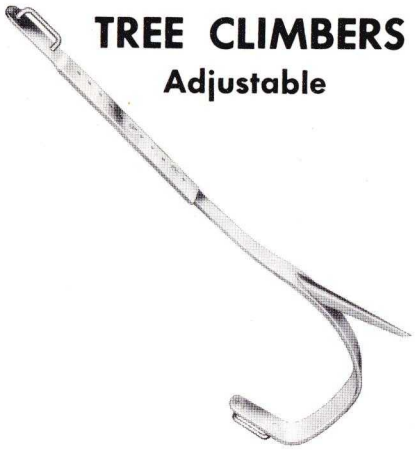


Made in matched pairs right and left. Extra wide arch gives better support. Offset shank brings gaff in proper line with leg bone to provide greater security and comfort. Riveted top loop, drop forged triangular ring at ankle. Fixed length pattern in following sizes: 15, 15-1/2, 16, 16-1/2, 17, 17-1/2 and 18 inches measured from instep to end of shank. Gaff 3-inches long measured on the outside and 1-13/16 inches on underside. Aluminum finish. Every climber individually tested.

For ankle straps and pads, see pages 44 and 45.

Cat. No.	Av. Wt. Per Pair
1945	3 lb.

TREE CLIMBERS
Adjustable



This tree climber is the same as 1907 except that it is made in the Klein adjustable pattern. Sliding portion is made of steel one-piece construction and permits adjustment to 14-1/2, 15, 15-1/2, 16, 16-1/2, 17, 17-1/2, 18, 18-1/2 and 19 inch sizes. Riveted strap loops. Aluminum finish. Every climber individually tested.

For ankle straps and pads, see pages 44 and 45.

Cat. No.	Av. Wt. Per Pair
1907-A	4½ lb.
*C1907-A Complete with straps and pads	4¾ lb.

*Furnished with 5301-9 calf straps, 5301-10 ankle straps and 8207 climber pads.

NOTE: In ordering fixed-length climbers, always specify length of shank. Measure from instep to the extreme end of leg iron which should come 1 inch below the knee joint for comfort. Position of gaff hole makes it impractical to interchange regular gaffs and tree climber gaffs.

BELTS, SAFETY STRAPS AND ACCESSORIES

Klein leather goods are made of first-quality, "slow process" vegetable tanned harness leather, rot and mildew proofed, selected for strength and durability. All Klein "D" Rings, Snaps and Buckles are drop forged from bar steel and tested to 1500 lb. All sewing is with hot waxed, genuine linen thread, lock stitched. All belts and safety straps are riveted by hand with solid copper rivets.

Most Klein Belts can be modified to meet all requirements of the EEI Specifications at no extra charge. Specify "To meet EEI Specifications" on order.

All Klein leather safety straps conform to EEI specifications.

RULES FOR CARE OF LEATHER

Go over leather at least once every 60 days and scrape out the "scale" that forms at metal contacts. Examine for stretch, wear, cracks and cuts. To wash—clean with saddle soap or other mild soap.

Dampen a rag with *Neat's-foot oil and rub into the leather on the hair side. Do not flush the oil directly from the can—every inch of the leather should be uniformly covered to keep it pliable and waterproof.

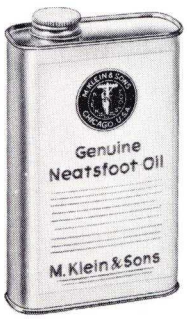
In storage, keep leather goods away from close contact with heat such as steam coils, radiators or stoves. Leather exposed to heat rapidly deteriorates, becoming dry, brittle and unreliable. After exposure to water or acid, leather goods should be wiped off as quickly as possible with a rag dipped in Neat's-foot oil.

Never dry damp or wet leather with the aid of heat. This weakens the fiber and may even destroy it.

BEND TEST—should only be made when leather contains sufficient oil to make it soft and pliable. At room temperature, bend the leather slowly with the grain side out over a mandrel not less than ½ in. in diameter through an angle of 180°. Do not bend at buckle holes. If belts and straps are abused by abrupt bending without a mandrel, cracks may occur because of the excessive strain put on the grain side. When tested as directed, the leather should show no cracks although there may be a slight opening up of the grain surface.

Reprints of above rules and other helpful information are available at no charge. Write for Bulletin 161.

NEAT'S-FOOT OIL



For the convenience of users and to assure the best grade, we can supply Neat's-foot oil with full directions for use.

Cat No.		Wt. Per Doz.
N.O.-1	Pint Can	15 lb.
N.O.-2	Quart Can	27 lb.

BELT ACCESSORIES

Cat No.		Av. Wt. Per Doz.
5130	Tape thong 10 in. long with fiber crossbar	½ lb.
5131	Knife snap with strap and rivets	1½ lb.
5132	Ring with strap and rivets	½ lb.

DIRECTIONS TO ASSURE PROPER FIT OF BELTS

Linemen's belts are usually specified by waist or body size, but to assure comfort it is important that "D" rings do not rest on hipbones. The correct position of the "D" rings is about one inch in front of hipbones. To obtain correct size belt, measure from hipbone to hipbone around the back and ADD TWO INCHES. Then refer to table below and select belt size.

Distance between "D" rings	18 in.	20 in.	22 in.	22 in.	24 in.	26 in.	28 in.	30 in.
Belt size	34 in.	36 in.	38 in.	40 in.	42 in.	44 in.	46 in.	48 in.

Belts may be ordered by size or by distance between "D" rings. Specify on order.

FULL-FLOATING "KLEIN-LINE" TOOL BELT

Sizes 34, 36, 38, 40, 42, 44, 46 and 48 in.
Other sizes to order at slight extra charge.

A full-floating trace of famous "Klein-Kord" 1¾ in. wide carries single bar "D" ring. Trace allows approximately 6 in. of free movement. Improved apron design permits visual inspection of trace throughout its entire length. The apron is securely riveted to the belt. A 1¼ in. harness leather strap is formed into five tool loops. Standard accessories—tape thong, knife snap, ring for glove pouch, four suspension rings and pocket tabs on both sides. Soft, pliable latigo leather cushion 4¾ in. wide is pad lined and edge rolled for comfort. No rivets come through the body pad.

Cat. No.	Width	Av. Wt. Per Doz.
5249	4¾ in.	55 lb.

KLEIN SEMI-FLOATING LEATHER TOOL BELT

Sizes 34, 36, 38, 40, 42, 44, 46 and 48 in.
Other sizes to order at slight extra charge.

Semi-floating belt made of soft, russet latigo leather with comfortable rolled edges. Body strap is finest harness leather 2 in. wide stitched to the cushion at back and passed through loops at end of cushion and single bar "D" ring. Harness leather tool strap 1¾ in. wide with five loops in the 1¼ in. loop strap. No rivets come through the inside of the belt. Fitted with knife snap, tape thong, ring for glove pouch, four suspension rings and pocket tabs on both sides.

Cat. No.	Width	Av. Wt. Per Doz.
5228	4½ in.	45 lb.

For tool pockets and holsters see pages 46 and 47.

LEATHER TOOL BELTS

Sizes 36, 38, 40, 42, 44 and 46 in.

Klein "Texas" belt with soft, pliable latigo leather pad. The main belt is of one piece harness leather. Width at the center back 4 in. tapered to 2¼ in. at hips. Single bar "D" ring. No rivets go through belt.

Has latigo flap to which plier pocket may be riveted or laced and ring for glove pouch.

Cat. No.	Av. Wt. Per Doz.
5204 T.S.O.	36 lb.

Sizes 34, 36, 38, 40, 42, 44, 46 and 48 in. Other sizes to order.

Finest-quality harness leather. Cushion 3½ in. wide carries "D" rings. Loop strap is 1½ in. wide. Formed into tool loops by riveting through the full thickness of the belt. Loop strap also passes through "D" rings. Surfaces taking wear of "D" rings are protected with copper safety liners riveted through the full thickness of the belt.

Cat. No.		Av. Wt. Per Doz.
5204		34 lb.
5204-L	Same as above but with latigo leather liner lock stitched to cushion, eliminates exposed rivets.	36 lb.

Made of finest harness leather. Cushion is 3½ in. wide and carries the double bar "D" rings. The outer strap is passed through "D" rings for additional safety. Surfaces taking the wear of "D" rings are protected by copper safety lines. Furnished with plier pocket, knife snap, tape thong and glove ring.

Cat. No.		Av. Wt. Per Doz.
5204-DE		38 lb.
5204-DEL	Same as above but with latigo leather liner lock stitched to cushion, eliminates exposed rivets.	40 lb.

For tool pockets and holsters see pages 46 and 47.

LEATHER TOOL BELTS

Sizes 36, 38, 40, 42, 44 and 46 in. Other sizes to order at slight extra charge.

Made of finest-quality harness leather. The cushion is 2¼ in. wide and carries double bar "D" rings. The outer loop strap is 1½ in. wide formed into tool loops by riveting to the cushion. It passes through the "D" rings. Surfaces taking wear of "D" rings are protected with copper safety liners riveted through the full thickness of the belt.

Cat. No.	Av. Wt. Per Doz.
5202	32 lb.

Sizes 36, 38, 40, 42, 44 and 46 in. Other sizes to order at slight extra charge.

First-quality harness leather. Inner cushion is 3 in. wide and is narrowed at each end to carry the double bar "D" rings. The body strap, 2 in. wide, is riveted and stitched to the cushion and passes through the "D" rings. Tool strap is provided and formed into loops at each side of the belt by riveting through the belt. Surfaces taking wear of "D" rings are protected by copper safety liners riveted through the full thickness of the belt.

Cat. No.	Av. Wt. Per Doz.
5211	34 lb.

LEATHER BELT AND SAFETY STRAP

This assembly comprises No. 5202 tool belt and No. 5250 safety strap. Standard sizes 36, 38, 40, 42, 44 and 46 in. Other sizes to order at slight extra charge.

Cat. No.	Size	Av. Wt. Per Doz.
5206-1A	Strap—1 ¾ in. x 5 ft. 8 in.	62 lb.

Be sure to specify size of belt when ordering.

For tool pockets and holsters see pages 46 and 47.

DERRICK BELT

Adjustable from 36 in. to 44 in.

Made of first-quality harness leather ideal for derrick men, structural steel workers, tower erectors, etc. Width at the back is 3 in. tapered to 2 in. at the buckle holes. A 3-in. "D" ring is set at the center of the back for life line. The buckle is fitted with double tongues for added strength.

Cat. No.		Av. Wt. Per Doz.
5212		30 lb.
5212-KK	As above but made of "Klein-Kord" fabric	30 lb.

STEEL WORKER'S BELT

Adjustable from 36 in. to 44 in.

Made of one-piece first-quality harness leather 2 in. wide. Fitted with three forged "D" rings for attachment of life line, etc. A leather loop is provided for a wrench. The main belt passes through the "D" rings which are held in place by latigo leather straps riveted to the belt. The 2-in. buckle has a solid forged frame with double tongue for added strength. Distance between outer "D" rings, 24 in.

Cat. No.	Av. Wt. Per Doz.
5214	28 lb.

LEATHER SAFETY HARNESS

Adjustable from 36 in. to 44 in.

Designed so that the wearer is in a perpendicular position even when unconscious and may be readily lifted through a manhole opening. Solid harness leather back plate 2¼ in. by 10 in. is stitched and riveted around the 1¼ in. adjustable belt. Back plate carries a drop forged "D" ring to which 25 ft. of ¾-in. rope is permanently attached. Shoulder straps are ¾ in. adjustable and riveted to the belt at back.

Cat. No.		Av. Wt. Per Doz.
5209	Complete with life line.	75 lb.

BELT SUSPENDERS

Four-point suspension with snaps. Each strap provided with buckle to permit easy adjustment. If rings are needed, see Cat. No. 5132, page 34.

Cat. No.	Av. Wt. Per Doz.
5213	9-1/2 lb.

WAIST BELT SUPPORTER

This supporter, commonly referred to as a gut strap, has four-point suspension with snap. Each strap is provided with a buckle to permit easy adjustment. If rings are needed, see Cat. No. 5132, page 34.

Cat. No.	Size	Av. Wt. Per Doz.
5208	36 in. to 46 in.	16 lb.

LEATHER SAFETY STRAPS

Straps are cut from finest quality harness leather or pliable, latigo leather. Back or center stock only. All rivets solid copper hand set with burrs. Snaps and buckles solid steel drop forgings tested to 1500 lb., galvanized finish. All straps meet requirements of EEI specifications.

Harness Leather

Cat. No.	Size and Description	Av. Wt. Per Doz.
5250	1¾ in. x 5 ft. 8 in. Standard Snaps.	32½ lb.
KL-5250	1¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps.	32½ lb.

Harness Leather

Cat. No.	Size and Description	Av. Wt. Per Doz.
5251	1¾ in. x 5 ft. 8 in. Standard Snaps. Leather wear pad at buckle.	32½ lb.
KL-5251	1¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps. Leather wear pad at buckle.	32½ lb.

Harness Leather

Cat. No.	Size and Description	Av. Wt. Per Doz.
5253	2 in. x 5 ft. 8 in. Standard Snaps.	40 lb.
KL-5253	2 in. x 5 ft. 8 in. "Klein-Lok" Snaps.	40 lb.

Double thick latigo leather sewn with hot waxed linen thread.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5259	1¾ in. x 5 ft. 8 in. Standard Snaps	32½ lb.
KL5259	1¾ in. x 5 ft. 8 in. "Klein Lok" Snaps	32½ lb.

LEATHER SAFETY STRAPS

Harness Leather

Cat. No.	Size and Description	Av. Wt. Per Doz.
5258	2 in. x 5 ft. 6 in. Standard Snaps. Stainless Clip.	40 lb.
KL-5258	2 in. x 5 ft. 6 in. "Klein-Lok" Snaps. Stainless Clip.	40 lb.

Similar in design to 5253 but with double tongue buckle.

Harness Leather

Cat. No.	Size and Description	Av. Wt. Per Doz.
5257-S	2 in. x 5 ft. 1½ in. "Bell System" type. Standard Snaps.	39 lb.
5257-L	2 in. x 5 ft. 10 in. "Bell System" type. Standard Snaps.	41 lb.

KLEIN DROP-FORGED SNAPS

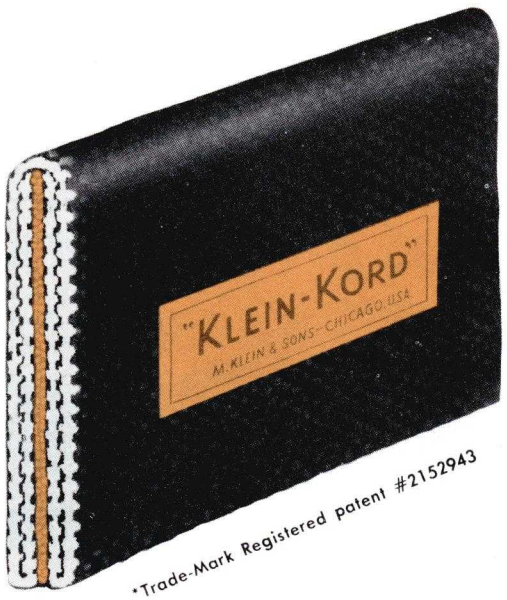
Klein safety straps are available with either standard snaps or "Klein-Lok" snaps. Snaps are illustrated to show construction and are only supplied on Klein safety straps. In standard snaps a wide rounded nose covers the latch to prevent "D" ring being released accidentally or hanging of nose on "D" ring.

"Klein-Lok" snaps are designed for maximum safety. To engage or release, it is necessary to depress both latches at the same time. Tested to 1500 lb.

"KLEIN-KORD"* BELTS AND SAFETY STRAPS

The original fabric material developed by Klein for safety straps. For many years "Klein-Kord" has been made the standard by leading public utility companies, telephone companies and others demanding maximum safety. "Klein-Kord" consists of multiple plies of fabric of special weave available in cotton, cotton and nylon or all nylon fabric. The plies are bonded together with neoprene frictioning and vulcanized—a construction that provides maximum strength and safety.

Red center plies provide an unmistakable signal when the use of the strap should be discontinued. "Klein-Kord" may be used with perfect safety until the two outer plies are worn through.



*Trade-Mark Registered patent #2152943

"STOP WHEN YOU SEE RED"

"Klein-Kord" should not be confused with imitations. It is not rubber transmission belting but specially woven with cross cords to provide extra strength and to permit the use of a tongue type buckle without the risk of slitting or ripping under severe tension. Friction buckles are unsuitable for safety straps because of the tendency to slip under load. "Klein-Kord" is extremely tough and resists damage from accidental cuts, heat, etc. It is uniform in thickness and strength. Has a low conductivity, is flexible, will not stretch in use and can be used for all purposes on poles, towers or tree trimming work.

PROPER CLEANING

We recommend "Stoddard's solution" for the removal of creosote and penta-chlorophenol. This solution is available from local drug stores. It is safe and easy to use. Excessively heavy deposits of creosote and penta-chlorophenol may be removed with a knife.

Caution: Do not use carbon tetrachloride or other highly toxic solutions which may act as a solvent to the neoprene bonding.

Stoddard solution: 75% Freon T. F. 25% Trichloroethylene.

ADVANTAGES

1. Guesswork as to safe period of use eliminated.
2. Great tensile strength. Factor of safety—plus.
3. Weatherproof.
4. Extremely tough; resists damage from accidental cuts, heat, etc.
5. Uniformity of thickness and strength.
6. Safety Straps can be made any length required.
7. Low conductivity. Flexible.
8. Permits use of regular tongue buckle for positive length adjustment.
9. No stretch in use.
10. Can be used for all purposes. On poles, towers or tree trimming work.

Bulletin 560 giving additional information will be sent on request.

"KLEIN-KORD" DRESSING

Not Recommended for use on Nylon Safety Straps

The life of "Klein-Kord" cotton fabric material can be materially increased if dressed at regular intervals with this special dressing. Use "Klein-Kord" dressing only. Each can gives full instructions for use.

Cat. No.		Av. Wt. Per Doz.
K K D-025	¼ pint can	4 lb. 11 oz.

"KLEIN-KORD" COTTON SAFETY STRAPS -- RED CENTER

The original "Klein-Kord" material proved through 28 years of service. Standard length 5 ft. 8 in. Also can be furnished from stock with standard or "Klein-Lok" snaps in the following lengths: 6 ft., 6 ft. 6 in., 7 ft., 8 ft.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5233	1 ¾ in. x 5 ft. 8 in. Standard Snaps.	36 lb.
KL-5233	1 ¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps.	36 lb.
5234	1 ¾ in. x 4 ft. 8 in. (Fixed Length) Standard Snaps.	25 lb.
KL-5234	1 ¾ in. x 4 ft. 8 in. (Fixed Length) "Klein Lok" Snaps.	25 lb.

(Other lengths can be furnished to order)

"KLEIN-KORD" NYLON SAFETY STRAPS -- RED COTTON CENTER

Made of multiple plies of strong, finely woven nylon frictioned in neoprene and vulcanized. Provides desired flexibility. The smooth surface gives long service, wears evenly and does not require dressing or treatment. Standard length 5 ft. 8 in. Also can be furnished from stock with standard or "Klein-Lok" Snaps in the following lengths: 6 ft., 6 ft. 6 in., 7 ft., 8 ft.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5294	1 ¾ in x 5 ft. 8 in. Standard Snaps.	34 lb.
KL-5294	1 ¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps.	34 lb.

(Other lengths can be furnished to order)

"KLEIN-KORD" ALL NYLON SAFETY STRAP -- RED CENTER

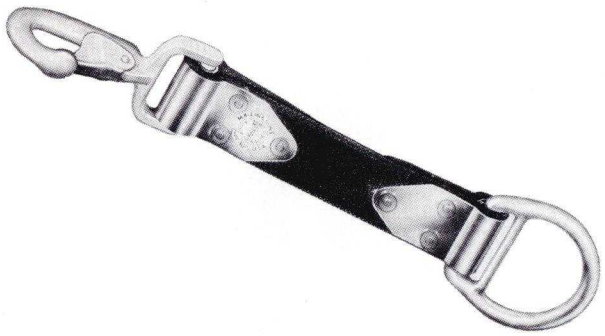
Meets all requirements of EEI specifications.

"Klein-Kord" nylon safety straps offer the desired flexibility with maximum strength. Highest dielectric characteristics of any material available. Standard length 5 ft. 8 in. Also can be furnished from stock with standard or "Klein-Lok" snaps in following lengths: 6 ft., 6 ft. 6 in., 7 ft., 8 ft.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5295	1 ¾ in. x 5 ft. 8 in. Standard Snaps.	34 lb.
KL-5295	1 ¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps.	34 lb.

(Other lengths can be furnished to order)

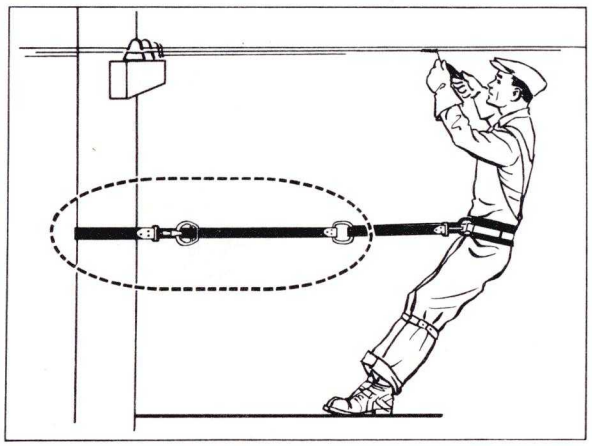
"KLEIN-KORD" COTTON EXTENSION STRAPS -- RED CENTER



This extension strap is used in connection with safety strap where extra length is necessary when working on large diameter poles.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5236	1 ¾ in. x 15 in. with Standard "D" rings and Standard Snap.	16 ½ lb.
KL-5236	1 ¾ in. x 15 in. with Standard "D" rings and "Klein-Lok" Snap.	16 ½ lb.

"KLEIN-KORD" COTTON DIVING BOARD STRAP -- RED CENTER



The diving board strap provides additional length when working from diving board or platform. It is used with a regular safety strap and gives additional reach. Fitted with two standard "D" rings, one fixed and one adjustable to fit pole diameter.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5238	1 ¾ in. x 7 ft. with Standard "D" rings and Standard Snap.	39 lb.
KL-5238	1 ¾ in. x 7 ft. with Standard "D" rings and Klein Lock Snap.	39 lb.

NYLON FABRIC TOOL BELT

This belt is made of multiple plies of nylon which is uniform in quality and possesses great strength and flexibility. Designed to provide maximum comfort and safety. Equipped with plier pocket, knife snap, tape thong, glove pouch ring, tool loops and lag wrench holder. Available in standard sizes, 36, 38, 40, 42, 44 and 46 in.

Cat. No.		Av. Wt. Per Doz.
5204-KK	With Standard "D" Rings. Width 4 in.	45 lb.
5204-KK-L	Latigo Leather Lined	45 lb.

TREE TRIMMERS BELT

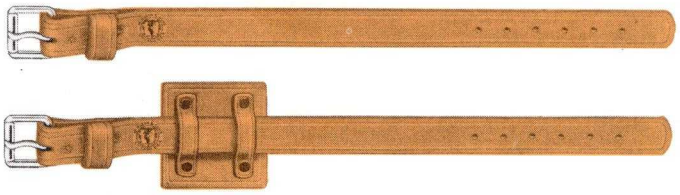
"KLEIN-KORD" NYLON RED COTTON CENTER

Weight of the wearer is distributed along the leg straps as well as the body strap. The safety line is attached to a floating "D" ring at the front. Made of multiple pliers of nylon bonded in neoprene. Drop forged hardware is set with solid copper rivets. Provided with harness snap. Adjustable for sizes from 36 in. to 46 in. Life line not supplied.

Cat. No.	Av. Wt. Per Doz.
5210	48 lb.

LEATHER CLIMBER STRAPS WITH SQUARE PADS

(ALL HARDWARE DROP FORGED AND TESTED)



The set consists of:

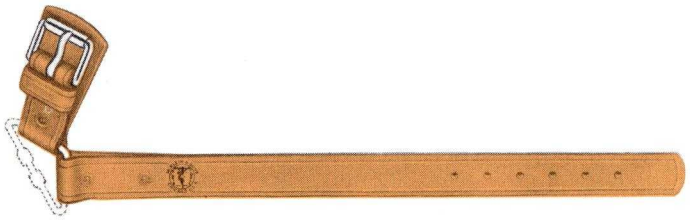
2 upper (or calf) straps 1¼ in. x 22 in.
2 lower (or ankle) straps 1¼ in. x 22 in.
2 square pads 4 in. x 4 in.

Cat. No.		Av. Wt. Per Doz. Sets
5301-1	One set complete with plain pads	20 lb.
5301-2	One set complete with sheep-lined pads	20 lb.
5301-3	One set complete with felt-lined pads	20 lb.

LEATHER CLIMBER STRAPS (WITHOUT PADS)

Cat. No.		Av. Wt. Per Doz. Pr.
5301-4	One pair (calf straps) 1¼ in. x 22 in.	7 lb.
5301-9	One pair (calf straps) 1 in. x 22 in.	6 lb.
5301-14	One pair (ankle straps) 1¼ in. x 26 in.	9 lb.
5301-10	One pair (ankle straps) 1 in. x 26 in.	8 lb.

LEATHER SPECIAL ANKLE STRAPS



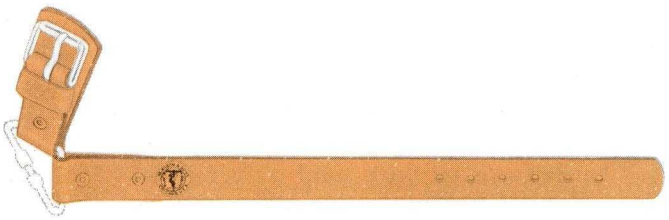
Supplied in two pieces with rivet and burrs. Punched for quick attachment. Drop forged, triangular ring gives support to full width of strap minimizing wear. (We will rivet these straps to 1945, 1945-A or 1956-A climbers when so ordered. See pages 27 to 31 for climbers.)

Cat. No.		Av. Wt. Per Doz. Pr.
5301-16	One pair 1¼ in. x 24 in. without ring	9 lb.
5301-26	One pair 1 in. x 24 in. without ring	8 lb.

NYLON CLIMBER STRAPS

Cat. No.		Av. Wt. Per Doz. Pr.
5301-18	One pair (calf straps) 1 in. x 22 in.	5 lb.
5301-21	One pair (calf straps) 1¼ in. x 22 in.	5 lb.
5301-19	One pair (ankle straps) 1 in. x 26 in.	6 lb.
5301-22	One pair (ankle straps) 1¼ in. x 26 in.	6 lb.

NYLON SPECIAL ANKLE STRAPS



Supplied in two pieces with rivets and burrs. Punched for quick attachment. Drop forged, triangular ring gives support to full width of strap minimizing wear. (We will rivet these straps to 1945, 1945-A, or 1956-A climbers when so ordered. See pages 27 to 31 for climbers.)

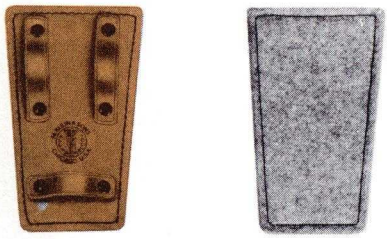
Cat. No.		Av. Wt. Per Doz. Pr.
5301-20	One pair 1 in. x 24 in. without ring	7 lb.
5301-23	One pair 1¼ in. x 24 in. without ring	8 lb.

ANGLE CLIMBER PADS

Right and left pattern of high-grade latigo leather filled with horsehair padding. Size 8 in. x 8 in.

Cat. No.		Av. Wt. Per Doz. Pr.
8210	One pair angle shape	12 lb.

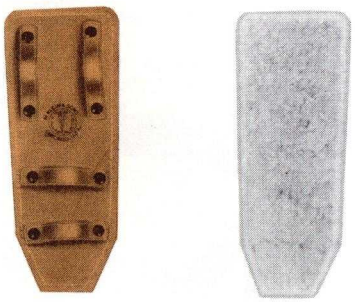
"BELL SYSTEM" CLIMBER PADS



6¼ in. long, 3¾ in. wide at top tapering to 2¾ in. at bottom. May be had sheep-lined, felt-lined or plain leather.

Cat. No.		Av. Wt. Per Doz. Pr.
8203	One pair plain leather	6 lb.
8204	One pair sheep-lined	6 lb.
8205	One pair felt-lined	6 lb.

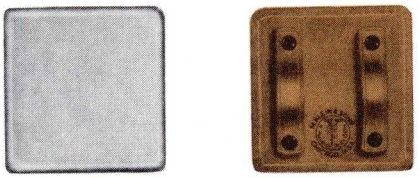
LONG CLIMBER PADS



Made of selected harness leather with riveted loops. Furnished plain, felt-lined or sheep-lined. Size: 9 in. x 3½ in.

Cat. No.		Av. Wt. Per Doz. Pr.
8207	One pair plain leather	5 lb.
8208	One pair sheep-lined	6 lb.
8209	One pair felt-lined	6 lb.

SQUARE CLIMBER PADS



Made of select harness leather 4 x 4 in. square. Inner side may be had sheep-lined, felt-lined or plain leather.

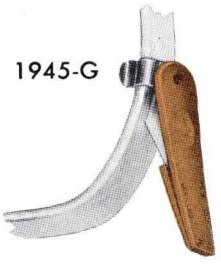
Cat. No.		Av. Wt. Per Doz. Pr.
8200	One pair sheep-lined	4 lb.
8201	One pair felt-lined	4 lb.
8202	One pair plain leather	3 lb.

PLASTIC GAFF GUARD

Made of polyvinyl chloride, molded in one piece, unique design makes it impossible for gaff to cut through vinyl. Snaps on leg iron. Color safety yellow.

Cat. No.		Av. Wt. Per Doz. Pr.
1959-G	One pair	2¼ lb.

CLIMBER GAFF GUARDS



For use on any Klein Climber. Made of top-grade harness leather with stainless steel clips. A stout piece of fiber acts to prevent point of gaff from penetrating guard.

Cat. No.		Av. Wt. Per Doz. Pr.
1901-MG	One pair	1 ¾ lb.

For use on any Klein Climber. Made of harness leather, riveted construction. Stainless steel spring clip.

Cat. No.		Av. Wt. Per Doz. Pr.
1945-G	One pair	1 ¾ lb.

Electricians New Plastic Pouch.

* Molded in 1-piece polyvinyl chloride.
* Strong, tougher than the finest leather.
* Unaffected by extremes in temperature, remains pliable even in coldest weather.
* Three plier pockets, two screw driver pockets, and a utility pocket for wrenches, skinning knives, other equipment.
* One-piece construction, no stitches or rivets.
* Drainage holes in all pockets prevent water from collecting.

Cat. No.	Size	Av. Wt. Per Doz.
5141 With Knife Snap	8″ x 10″	13¾ lb.
5141-LS Without Snap	8″ x 10″	13½ lb.

Made of high-quality harness leather. An all-purpose pocket for pliers, folding rule and screwdriver. Openings at bottom. Top double thickness to permit riveting to belt.

Cat. No.	Over-All Size	Av. Wt. Per Doz.
5118-PRS	6½ in. x 8¾ in.	8 lb.

Made of heavy harness leather with four pockets. An extra long 6½-in. pocket is provided for screwdriver. Has riveted straps for attaching to belt.

Cat. No.	Over-All Size	Av. Wt. Per Doz.
5125	7 in. x 9 in.	7½ lb.

High-quality leather pouch specially designed for electricians. Has large gusseted utility pocket, two plier pockets, two screwdriver pockets and a knife snap.

Cat. No.	Over-All Size	Av. Wt. Per Doz.
5126	6½ in. x 8½ in.	7½ lb.

A high-quality leather pouch specially designed for electricians. Has extra large gusseted utility pocket, three plier pockets, two screwdriver pockets and knife snap.

Cat. No.	Over-All Size	Av. Wt. Per Doz.
5127	7 in. x 10 in.	8 lb.

Drawing indicates arrangement of pockets

Here is a telephone installer's pocket, made of highest grade harness leather, riveted throughout to assure long life. Ten separate compartments provide places for a wide variety of pliers, screwdrivers and other tools. Equipped with ring and tape thong. Slots permit fastening to belt.

Cat. No.	Size	Av. Wt. Per Doz.
5190	8¾ in. x 6 in.	8 lb.

A newly developed pouch of high-quality harness leather, equipped with a glove snap fastener to permit closing. Riveted throughout to assure long life. Slots permit fastening to belt if desired.

Cat. No.	Size	Av. Wt. Per Doz.
5135	4 in. x 10 in. closed	2½ lb.

Made of heavy harness leather. Top double thickness for riveting to belt. One pocket for side cutting plier and a separate pocket for 6-ft. rule.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5118-R	4¾ in. x 8 in.	7½ lb.

Made of heavy harness leather. Top double thickness for riveting to belt. Compartment for side cutting plier and additional pocket for knife.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5118-K	4¾ in. x 8 in.	7½ lb.

Made of heavy harness leather. Top flap double thickness for riveting to belt. Open at bottom. Pocket for side cutting plier and one for screwdriver.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5118-S	4 in. x 8 in.	5½ lb.

Cat. No. 5163

Cat. No. 5116

A harness leather pocket for holding skinning knives. It can be carried in the hip pocket or riveted to a belt. Opening at bottom prevents accumulation of water or dirt.

Cat. No.	Size	Av. Wt. Per Doz.
5163	3 in. x 9 in.	4 lb.

Made of heavy harness leather with loop to slip over belt. Designed to carry 6-, 7-, 8-, or 9-in. side cutting plier.

Cat. No.	Size	Av. Wt. Per Doz.
5116	3½ in. x 10 in.	6 lb.

Cat. No. 5129

Cat. No. 5138

A pocket of high-quality leather to hold flashlight.

Cat. No.	Size	Av. Wt. Per Doz.
5129	3 in. x 8 in.	4¾ lb.

Designed to hold most standard voltage testers. Strap with snap prevents meter jolting out of pocket.

Cat. No.	Size	Av. Wt. Per Doz.
5138	3 in. x 8 in.	4¾ lb.

A large, roomy pouch. Harness leather front and back with gussets of soft latigo leather. Useful for holding a variety of tools, bolts, etc. Attaches to belt with latigo leather thongs. Pouch expands to 6½ in. x 6½ in. x 3¼ in.

Cat. No.	Over-All Size	Av. Wt. Per Doz.
5140K	7 in. x 9 in.	10½ lb.

Cat. No. 5107

Cat. No. 5112

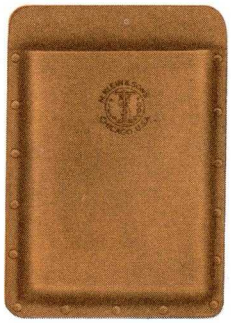
Made of high-quality harness leather. Will carry 6, 7, 8 or 9-in. plier. Has slits through which belt may be inserted or can be riveted on. Nose protrudes through opening at bottom.

Cat. No.	Size	Av. Wt. Per Doz.
5107	3½ in. x 8½ in.	3 lb.

Similar to 5107 except plier does not protrude. Bottom is open to prevent collection of dirt or water. A loop at the back permits sliding in belt or pocket can be riveted on.

Cat. No.	Size	Av. Wt. Per Doz.
5112	3½ in. x 9 in.	4¾ lb.

Cat. No. 5100



Cat. No. 5111

A high-quality leather pocket designed to hold Klein Electricians' Scissors No. 2100-5. Loop provided at back of pocket for attaching to waist belt.

Cat. No.	Size	Av. Wt. Per Doz.
5100	6 in.	3 lb.

Made of harness leather. Ideal for carrying pliers or other tools in the hip pocket. Prevents wear and cutting of clothes or possible injury.

Cat. No.	Size	Av. Wt. Per Doz.
5111	5 in. x 7 in.	5½ lb.

A sturdy white canvas bag approximately 6 in. x 12 in. with a strong zipper that closes the full length of the mouth. Ideal for holding small tools. Ample room for pliers, screwdriver, wrenches, etc.

Cat. No.	Size	Av. Wt. Per Doz.
5139	6 in. x 12 in.	3 lb.

A lightweight belt of heavy web belting with harness leather tool loops and latigo tape thong. Furnished with friction buckle.

Cat. No.	Size Adjustable	Av. Wt. Per Doz.
5227-M	32 in. — 40 in.	6 lb.
5227-L	40 in. — 48 in.	7 lb.

A lightweight belt of genuine harness leather with tool loops and tape thong may be used with Klein tool pouches

Cat. No.	Size Adjustable	Av. Wt. Per Doz.
5207M	32 in. to 40 in.	7 lb.
5207L	38 in. to 46 in.	8 lb.

Made of leather for carrying rubber gloves (folded). Equipped with snap and ring for attaching to body belt.

Cat. No.	Size and Description	Av. Wt. Per Doz.
5120-15	7½ in. x 15 in.	7 lb.

CANVAS TOOL BAG

Made of one-piece No. 10 white duck covered on the bottom and 3 in. up the sides with heavy leather lock stitched and cemented. Bottom is protected with steel studs. Mouth has 12-gauge steel frame. Harness leather handles and two retaining straps and buckles. May be furnished with lock and key, also shoulder strap to order.

Cat. No.	Length	Width	Depth	Av. Wt. Each
5102-12	12 in.	6 in.	10 in.	2¼ lb.
5102-14	14 in.	6 in.	14 in.	2½ lb.
5102-16	16 in.	6 in.	14 in.	3 lb.
5102-18	18 in.	6 in.	14 in.	3¼ lb.
5102-20	20 in.	6 in.	15 in.	3½ lb.
5102-22	22 in.	6 in.	15 in.	3¾ lb.
5102-24	24 in.	6 in.	15 in.	4 lb.

CANVAS TOOL BAG

A strong bag of finest No. 10 white duck. One piece, covered with leather on the bottom and 8 in. up the sides. Leather is lock stitched and cemented. Bottom protected with steel studs. Mouth of the bag has a 12-gauge steel frame. Harness leather handles with two retaining straps and buckles. May be furnished with lock and key, also shoulder strap to order.

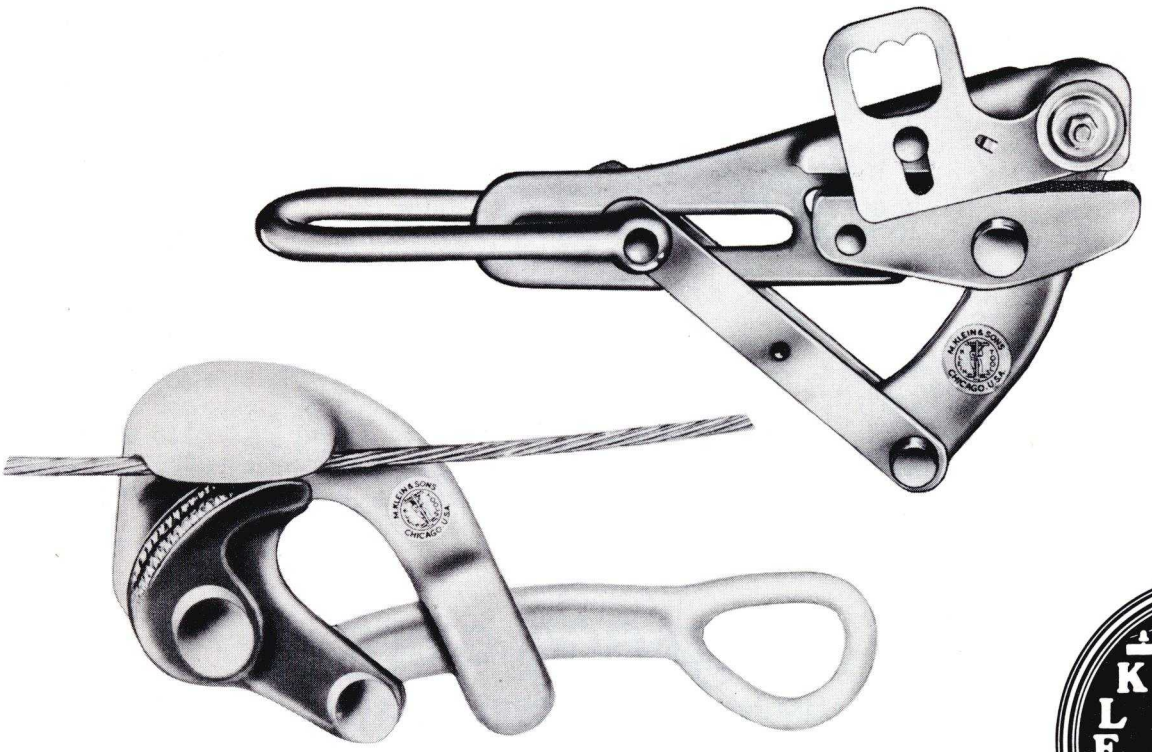
Cat. No.	Length	Width	Depth	Av. Wt. Each
5105-16	16 in.	6 in.	14 in.	3 lb.
5105-18	18 in.	6 in.	14 in.	3½ lb.
5105-20	20 in.	6 in.	15 in.	3¾ lb.
5105-22	22 in.	6 in.	15 in.	4 lb.
5105-24	24 in.	6 in.	15 in.	4½ lb.

INSPECTOR'S TOOL BAG

Made of harness leather to stand hard usage. Has a leather shoulder strap combined with pad and hand strap. The bottom is three ply protected with steel studs. Retaining straps pass clear around the back for security. All seams lock stitched with hot waxed linen thread.

Cat. No.	Size	Av. Wt. Each
5108-14	14 in. x 8 in.	5 lb.
5108-16	16 in. x 8 in.	5¾ lb.
5108-18	18 in. x 8 in.	6 lb.
5108-20	20 in. x 8 in.	6½ lb.
5108-22	22 in. x 8 in.	7 lb.
5108-24	24 in. x 8 in.	7¼ lb.

KLEIN "CHICAGO" AND "HAVEN" GRIPS



For years Klein Grips have been the accepted standard of public utility companies and others requiring a strong, non-slipping grip.

Klein Grips are available for use on any type of conductor and patterns are available specially designed for hot line work.

These grips are to be used for pulling up lines to tension only and are not recommended for use as anchors.

TO CHOOSE CORRECT SIZE OF GRIP

Consult reference tables in the rear of this catalog for diameters of wire in general use. For your convenience there is also a table giving decimal equivalents of fractions.

If you wish to send us outside diameters and full description of wire or strand, we will recommend the proper grip.

We recommend Klein "Chicago" Grips with bronze-lined jaws to avoid possible damage to surface of conductor.

Grips with bronze-lined jaws are indicated by the letter "B" after the catalog number. All grips furnished with galvanized finish.

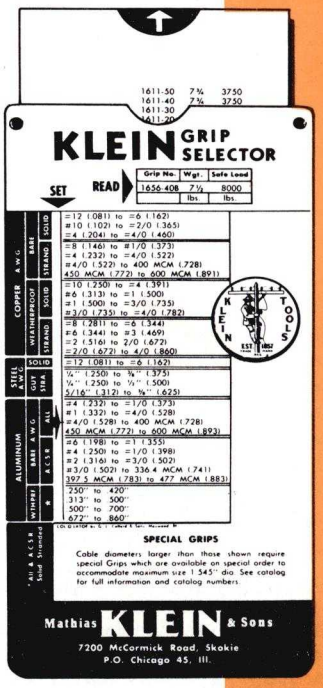
All Chicago Grips are furnished with self-locking loop handles which allow the Grip Jaws to be locked in any open position. To lock, open Jaws and fold loop handle toward side plates.

KLEIN GRIP SELECTOR

Klein has available without charge to utility companies a grip selector which shows at a glance the proper grip for any type of wire and gives full information for servicing and maintenance.

GRIP MAINTENANCE:

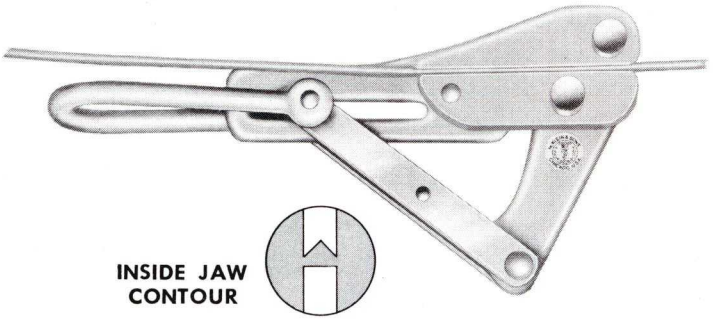
Bulletin 261 on grip maintenance available on request.



KLEIN "CHICAGO" GRIPS FOR BARE WIRE

(SOLID AND STRAND)

Plain type jaw suitable for bare wire.



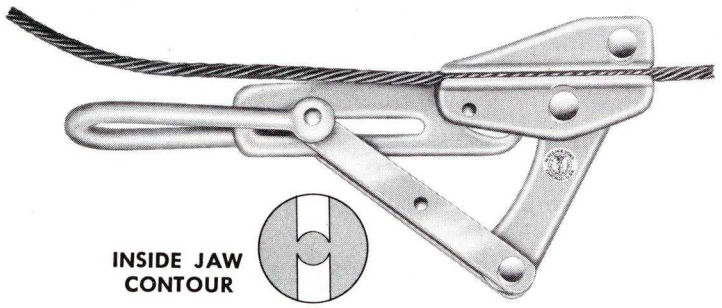
Cat. No.	Maximum Wire Size	Minimum Wire Size	Approx. Max. Opening	Approx. Weight Each	Safe Load	Jaw Length
1613-30	6 B & S Solid (.162″)	12 B & S Solid (.081″)	.22″	1 ½ lb.	1,500 lb.	3″
1613-30B	6 B & S Solid (.162″)	12 B & S Solid (.081″)	.22″	1 ½ lb.	1,500 lb.	3″
1613-40	0 B & S Strand (.373″)	10 B & S Solid (.102″)	.44″	3 lb.	2,250 lb.	4″
1613-40B	0 B & S Strand (.373″)	10 B & S Solid (.102″)	.44″	3 lb.	2,250 lb.	4″
1613-50	4/0 B & S Strand (.552″)	6 B & S Solid (.162″)	.62″	8 lb.	4,000 lb.	5½″
1613-50B	4/0 B & S Strand (.552″)	6 B & S Solid (.162″)	.62″	8 lb.	4,000 lb.	5½″

B indicates bronze-lined jaws.

KLEIN "CHICAGO" GRIPS

FOR BARE ALUMINUM AND COPPER CABLES

This series of grips is specially designed for use on bare A.C.S.R. aluminum and stranded copper cables.



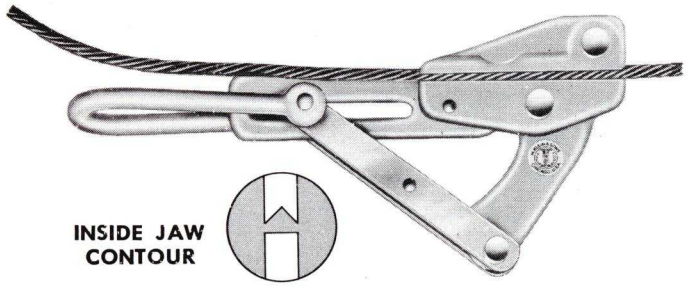
Cat. No.	Maximum Conductor	Minimum Conductor	Approx. Max. Opening	Approx. Weight Each	Safe Load	Jaw Length
1656-20	1/0 A.C.S.R. (.398″)	6 A.C.S.R. (.198″)	.50″	3 lb.	2,200 lb.	4″
1656-20B	1/0 A.C.S.R. (.398″)	6 A.C.S.R. (.198″)	.50″	3 lb.	2,200 lb.	4″
1656-30	3/0 A.C.S.R. (.502″)	2 A.C.S.R. (.316″)	.56″	3 ¾ lb.	3,500 lb.	4¾″
1656-30B	3/0 A.C.S.R. (.502″)	2 A.C.S.R. (.316″)	.56″	3 ¾ lb.	3,500 lb.	4¾″
1656-40	336,400 CM A.C.S.R. (.741″)	3/0 A.C.S.R. (.502″)	.75″	7 ¾ lb.	8,000 lb.	5½″
1656-40B	336,400 CM A.C.S.R. (.741″)	3/0 A.C.S.R. (.502″)	.75″	7 ¾ lb.	8,000 lb.	5½″
1656-50	477,000 CM A.C.S.R. (.883″)	397,500 CM A.C.S.R. (.783″)	.94″	7 ¾ lb.	8,000 lb.	5½″
1656-50B	477,000 CM A.C.S.R. (.883″)	397,500 CM A.C.S.R. (.783″)	.94″	7 ¾ lb.	8,000 lb.	5½″
*1656-AB	500,000 CM A.C.S.R. (.904″)	3/0 A.C.S.R. (.502″)	.94″	7 ¾ lb.	8,000 lb.	5½″

B indicates bronze-lined jaws.

*For use on aluminum cables where minimum conductor damage is essential we hold stock of parts and jaws are milled to fit exact diameter of cable. Range of conductor size is given for general information and is made for one size cable only. **ORDERS MUST SPECIFY EXACT OUTSIDE DIAMETER OF CABLE.**

KLEIN IMPROVED "CHICAGO" GRIPS

FOR MESSENGER, GUY STRAND AND CONDUCTORS UP TO ½-IN. DIAM.

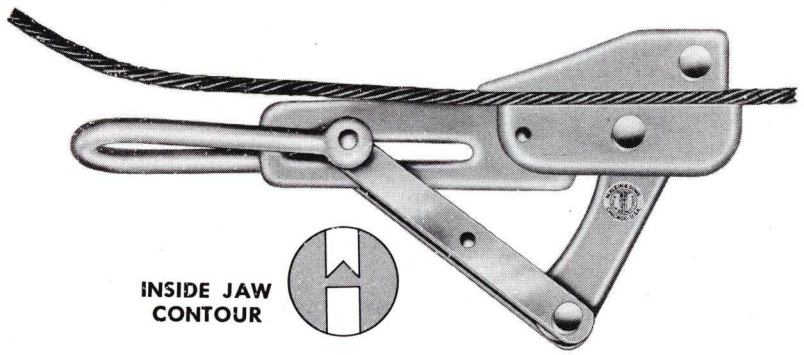


Cat. No.	Maximum Cable Size	Minimum Cable Size	Approx. Max. Opening	Safe Load	Approx. Weight Each	Jaw Length
1628-3	1/0 B & S Strand (.373″)	10 B & S Solid (.102″)	.44″	4,500 lb.	3 lb.	4″
1628-3B	1/0 B & S Strand (.373″)	10 B & S Solid (.102″)	.44″	4,500 lb.	3 lb.	4″
1628-5	4/0 B & S 7 Strand Copper (.522″)	6 A.C.S.R. (.198″)	.58″	8,000 lb.	6 lb.	5″
1628-5B	4/0 B & S 7 Strand Copper (.522″)	6 A.C.S.R. (.198″)	.58″	8,000 lb.	6 lb.	5″

B indicates bronze-lined jaws.

KLEIN "CHICAGO" GRIPS

FOR MESSENGER AND GUY STRAND AND WIRE ROPE

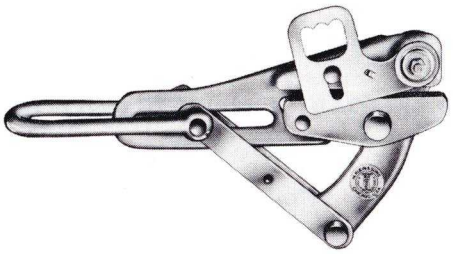


Cat. No.	Maximum Cable Size	Minimum Cable Size	Approx. Max. Opening	Safe Load	Approx. Weight Each	Jaw Length
1628-6	7/16″ Galvanized Steel Strand (.438″)	3/16″ Galvanized Steel Strand (.188″)	.50″	8,000 lb.	8½ lb.	6″
1628-6B	7/16″ Galvanized Steel Strand (.438″)	3/16″ Galvanized Steel Strand (.188″)	.50″	8,000 lb.	8½ lb.	6″
1628-16	5/8″ Galvanized Steel Strand (.625″)	5/16″ Galvanized Steel Strand (.312″)	.69″	15,000 lb.	15⅛ lb.	7¼″
1628-16B	5/8″ Galvanized Steel Strand (.625″)	5/16″ Galvanized Steel Strand (.312″)	.69″	15,000 lb.	15⅛ lb.	7¼″

KLEIN IMPROVED "CHICAGO" GRIPS

FOR HOT LINE WORK

FURNISHED WITHOUT SPRING



May be placed on wire with hot line stick. When stick is removed, safety latch closes automatically—cannot fall off accidentally. **For hot or dead work grips can be furnished with springs.** If springs are desired, please prefix letter "S" before catalog number. Example S 1628-5BH.

FOR BARE CONDUCTORS

Cat. No.	Maximum Conductor	Minimum Conductor	Approx. Max. Opening	Safe Load	Approx. Weight Each
1613-40H	1/0 B & S Strand (.375″)	10 B & S Solid (.102″)	.44″	2,250 lb.	3¼ lb.
1628-3H	1/0 B & S Strand (.373″)	10 B & S Solid (.102″)	.44″	4,500 lb.	3¼ lb.
1628-3BH	1/0 B & S Strand (.373″)	10 B & S Solid (.102″)	.44″	4,500 lb.	3 lb.
1628-5H	4/0 B & S Strand (5.22″)	6 A.C.S.R. (.198″)	.58″	8,000 lb.	6¼ lb.
1628-5BH	4/0 B & S Strand (5.22″)	6 A.C.S.R. (.198″)	.58″	8,000 lb.	6¼ lb.
1656-20BH	1/0 A.C.S.R. (.398″)	6 A.C.S.R. (.198″)	.50″	2,200 lb.	3 lb.
1656-30BH	3/0 A.C.S.R. (.502″)	2 A.C.S.R. (.316″)	.56″	3,500 lb.	3¾ lb.
1656-40BH	336,400 CM A.C.S.R. (.741″)	3/0 A.C.S.R. (.502″)	.75″	8,000 lb.	7¾ lb.
1656-50BH	477,000 CM A.C.S.R. (.883″)	397,500 CM A.C.S.R. (.783″)	.94″	8,000 lb.	7¾ lb.
*1656-ABH	500,000 CM A.C.S.R. (.904″)	3/0 A.C.S.R. (.502″)	.94″	8,000 lb.	7¾ lb.

B indicates bronze-lined jaws.

FOR INSULATED CONDUCTORS

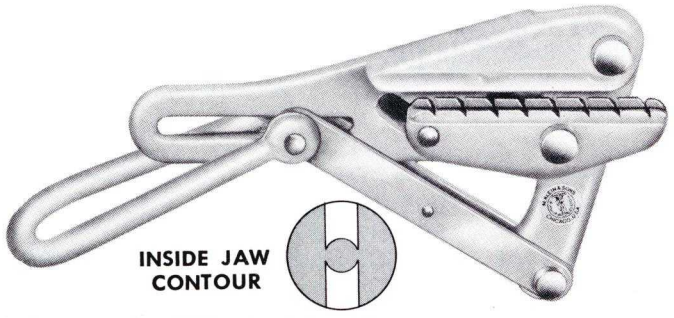
Note: Due to various types of Weatherproof coatings available, selection of proper grips is determined by O. D. of Cable.

Cat. No.	Maximum Conductor	Minimum Conductor	Approx. Max. Opening	Safe Load	Approx. Weight Each
1611-20H	.420″	.198″	.50″	2,200 lb.	3 lb.
1611-30H	.500″	.313″	.56″	3,500 lb.	3¾ lb.
1611-40H	.700″	.500″	.75″	3,750 lb.	7¾ lb.
1611-50H	.860″	.672″	.94″	3,750 lb.	7¾ lb.
1659-20H	.420″	.200″	.46″	2,200 lb.	3¼ lb.
1659-40H	.796″	.490″	.83″	8,000 lb.	8 lb.
1659-50H	1.014″	.796″	1.04″	8,000 lb.	8 lb.

*For use on copper or aluminum conductors or wire rope we hold stock of parts; and jaws are milled to fit diameter desired. Range of conductor size is given for general information and is made for **one size cable only.** Furnished only with bronze-lined jaws. Orders must specify exact outside diameter of cable.

Many other Klein Chicago Grips are available special with hot line latches. For further information write us on your requirements.

KLEIN "CHICAGO" GRIPS FOR WEATHERPROOF WIRE



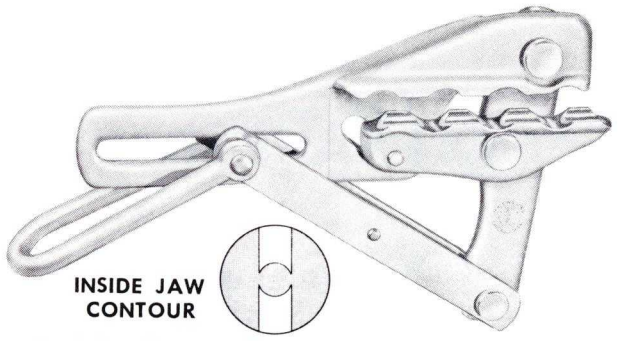
All sizes of wire shown below are for "Weatherproof."

Cat. No.	Maximum Wire Size	Minimum Wire Size	Approx. Max. Opening	Safe Load	Approx. Weight Each	Jaw Length
1611-20	.420″	.198″	.50″	2,200 lb.	3 lb.	4″
1611-30	.500″	.313″	.56″	3,500 lb.	3¾ lb.	4¾″
1611-40	.700″	.500″	.75″	3,750 lb.	7¾ lb.	5½″
1611-50	.860″	.672″	.94″	3,750 lb.	7¾ lb.	5½″

NOTE: Due to various types of weatherproof coatings available, selection of proper grips is determined by outside diameter of cable.

KLEIN "CHICAGO" GRIPS

FOR PVC COVERED CONDUCTORS



All sizes of wire shown below are for "Weatherproof."

Specially machined jaws allow snaking insulated conductors through jaws, eliminating slippage and preventing conductor damage. No necessity to strip insulation from conductor.

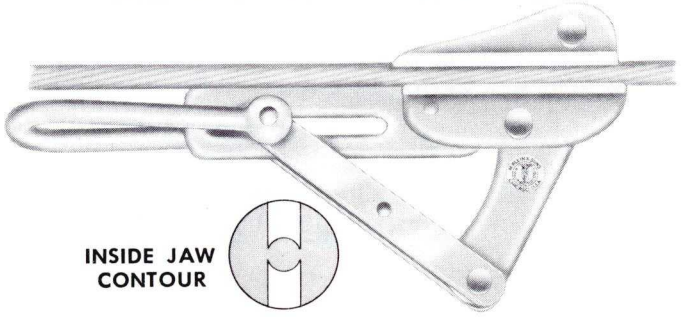
Cat. No.	Maximum Conductor	Minimum Conductor	Approx. Max. Opening	Safe Load	Approx. Weight Each	Jaw Length
1659-20	.420″	.200″	.46″	2,200 lb.	3 lb.	4″
1659-30	.500″	.313″	.56″	3,500 lb.	3¾ lb	4¾″
1659-40	.796″	.490″	.83″	8,000 lb.	7¾ lb.	5½″
1659-50	1.014″	.796″	1.04″	8,000 lb.	7¾ lb.	5½″

KLEIN "CHICAGO" GRIPS

FOR LARGE DIAMETER CONDUCTORS

For hollow conductors and other large diameter cables the jaws of the grip must be shaped to provide maximum contact with the circumference of the cable to prevent conductor damage. We hold grips in blank and finish as necessary. Allow 30 days for delivery.

ORDERS MUST SPECIFY EXACT OUTSIDE DIAMETER OF CABLE
MADE FOR ONE SIZE CABLE ONLY



Cat. No.	Maximum Cable Size	Minimum Cable Size	Approx. Max. Opening	Safe Load	Approx. Weight Each	Jaw Length
1628-16BP	605,000 CM A.C.S.R. (.970″)	2 A.C.S.R. (.316″)	1.06″	15,000 lb.	17 lb.	7¼″
1628-16P	605,000 CM A.C.S.R. (.970″)	2 A.C.S.R. (.316″)	1.06″	15,000 lb.	17 lb.	7¼″
1628-30	1,033,500 CM A.C.S.R. (1.246″)	477,000 CM A.C.S.R. (.833″)	1.35	20,000 lb.	25 lb.	10¾″
1628-30B	1,033,500 CM A.C.S.R. (1.246″)	477,000 CM A.C.S.R. (.833″)	1.35	20,000 lb.	25 lb.	10¾″
1628-40	1,590,000 CM A.C.S.R. (1.545″)	1,033,000 CM A.C.S.R. (1.246″)	1.60	25,000 lb.	29 lb.	10¾″
1628-40B	1,590,000 CM A.C.S.R. (1.545″)	1,033,000 CM A.C.S.R. (1.246″)	1.60	25,000 lb.	29 lb.	10¾″
*1628-50	1,590,000 CM A.C.S.R. (1.602″)	666,600 CM A.C.S.R. (1.00″)	1.66	25,000 lb.	29 lb.	10¾″
*1628-50B	1,590,000 CM A.C.S.R. (1.602″)	666,600 CM A.C.S.R. (1.00″)	1.66	25,000 lb.	29 lb.	10¾″

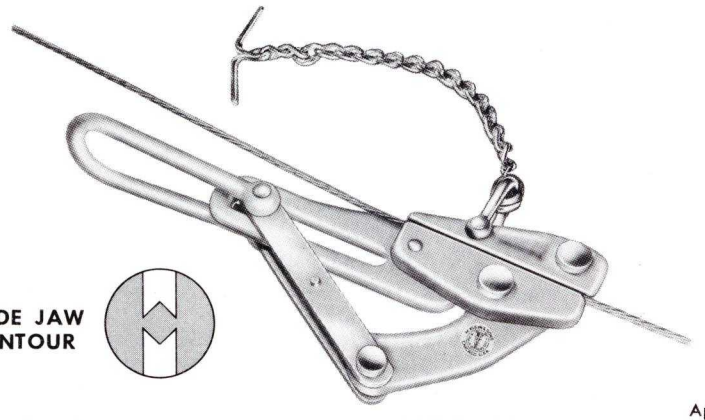
B indicates bronze-lined jaws.

*Furnished with removable floating jaw, which allows maximum coverage of cables and eliminates conductor damage, particularly under heavy loads. The removable jaw is held in place by a bolt swedged into the lever arm of grip secured by a nut and cotter pin. It is necessary to remove the jaw of the grip to insert the cable.

KLEIN "CHICAGO" GRIPS

Bell System Type

1628-5 AT is identical to Bell System type "L" strand puller and 1628-16 AT identical to Bell System type "H" strand puller. Fitted with chain, toggle and shackle as shown.



Catalog No.	Maximum Cable Size	Minimum Cable Size	Approx. Max. Opening	Safe Load	Approx. Weight Each	Jaw Length
1628-5 AT	½" Galvanized Steel Strand (.500")	¼" Galvanized Steel Strand (.250")	.58"	8,000 lb.	6 lb.	5"
1628-16 AT	½" Galvanized Steel Strand (.500")	5/16 Galvanized Steel Strand (.312")	.56"	15,000 lb.	15½ lb.	7¼"

KLEIN IMPROVED "HAVEN" GRIPS

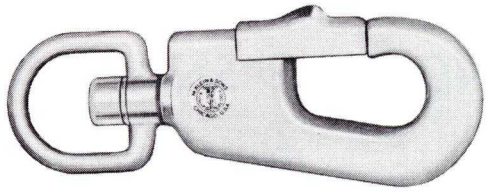
1604-10

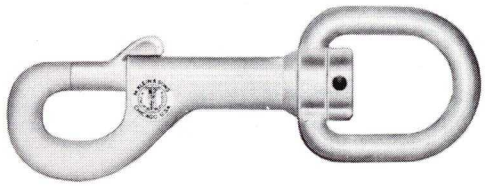
1625-20

Cat. No.	Maximum Cable Size	Minimum Cable Size	Approx. Max. Opening	Safe Load	Approx. Weight Each
1604-10	4 B&S (.204")	14 B&S (.064")	.24"	2,500 lb.	1 lb.
1604-20	.500 Steel Strand	7 B&S (.144")	.53"	5,000 lb.	2½ lb.
1604-20L	Same as 1604-20 but with swing latch as supplied on 1625-20				
*1625-20	.750" Wire Rope	2 B&S (.284")	.78"	8,000 lb.	3½ lb.

*Can be furnished for ⅞" or 1" cable to order

TACKLES, HAND LINES AND SNAP HOOKS





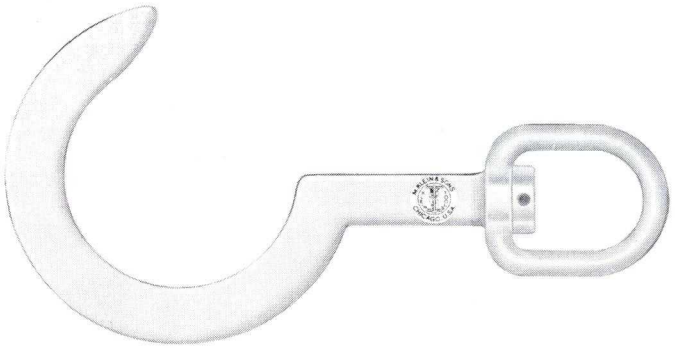
Maximum safety is the predominant feature of Klein Tackles and Hand Lines. All hooks and snaps are drop forged from alloy steel for maximum strength. The rope is of the finest quality four strand Manila available. All equipment is tested to carry the load it is designed for with an ample margin of safety.

KLEIN ANCHOR HOOK FOR TACKLES

A drop forged steel hook approximately 5½" long by 3¼" across the throat. Eye has an inside diameter of ⅝" to engage with snap on Klein Tackle #1802-30 and H1802-30. Galvanized finish. Designed to slip under insulator and engage pin on cross arm. Safe load 1,500 lb.

Cat. No.	Average Weight Per Dozen
258	4 lb.

KLEIN SWIVEL ANCHOR HOOK FOR TACKLES

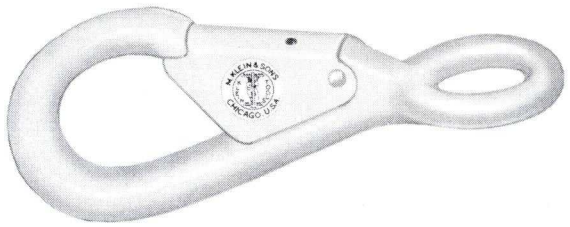


Drop forged steel. Approximately 6½" long and 3¼" across the throat. Swivel clevis will engage with snap on Klein Tackles. No. 1802-30 and H1802-30. Swivel prevents twisting and kinking of rope. Safe load 1,500 lb.

Designed to slip under insulator and engage pin on cross arm.

Cat. No.	Average Weight Per Dozen
259	4 ½ lb.

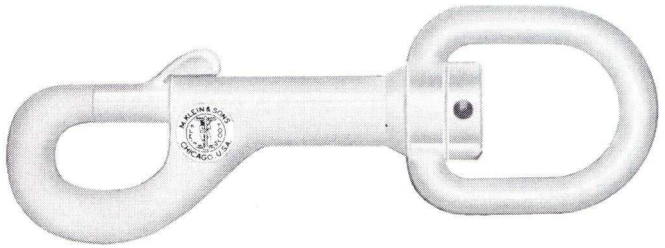
KLEIN HAND LINE SNAP HOOK



Drop forged steel. Safe load 2,000 lb. Length overall 5½". Eye is 1" I.D. Snap opens to ¾".

Cat. No.	Average Weight Per Dozen
443-A	6 ½ lb.

KLEIN SWIVEL HAND LINE SNAP



Drop forged steel with swivel clevis and quick acting plunger style latch. Designed to take ½" or lighter hand lines. Swivel action prevents accidental fouling into secondary wires. Safe load 750 lb.

Cat. No.	Average Weight Per Dozen
470	3 lb.

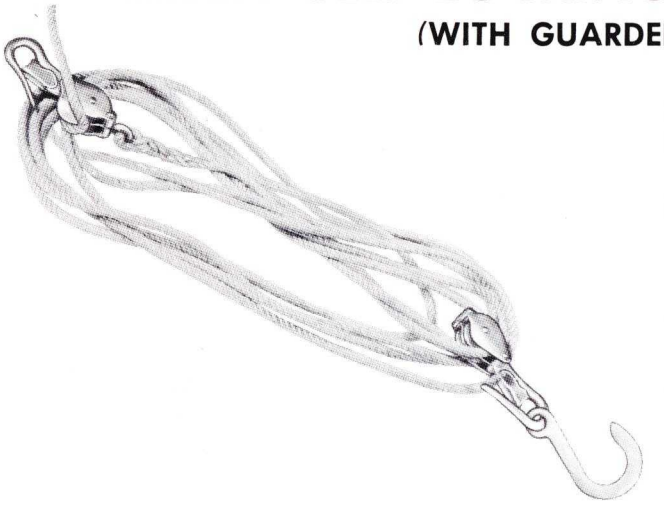
KLEIN SELF-LOCKING BLOCK TACKLE

Light steel shell blocks galvanized, fitted with snubbing hook to lock load in any position. Sheaves are aluminum alloy and are bronze bushed. May be had with drop forged hook #258 or swivel hook #259. These hooks are designed to fit under insulator and engage pin on cross arm. Rope is of highest quality four-strand Manila. Rope not spliced to block. Safe load 1200 lb.

Cat. No.	Description	Weight Each
1802-30	Furnished with 25 ft. 3/8" rope and detachable hook #258	2 1/2 lb.
1802-30S	Furnished with 25 ft. 3/8" rope and detachable swivel anchor hook #259	2 1/2 lb.

KLEIN SELF-LOCKING BLOCK TACKLE

(WITH GUARDED SNAPS)



Identical with the block tackle described above except that the snaps are "guarded." The nose of each hook is lengthened to extend over the latch or keeper. Safe load 1,200 lb. Rope not spliced to block.

Cat. No.	Description	Weight Each
H1802-30	Furnished with 25 ft. 3/8" rope and detachable hook #258	3 1/2 lb.
H1802-30S	Furnished with 25 ft. 3/8" rope and detachable swivel anchor hook #259	3 1/2 lb.

KLEIN SELF-LUBRICATING HEAVY BLOCK TACKLE

Consists of two double sheave blocks. The spring-guarded snap hooks and eye are drop forgings. Side plates are wrought. Pulleys are bronze bushed and self-lubricating. Galvanized finish. Rope is of four-strand Manila spliced to eye of block with galvanized thimble.

Cat. No.	Description	Weight Each
1802-40	Furnished with 30 ft. of 1/2" rope	15 1/2 lb.
1802-50	As above with 5/8" rope	17 3/4 lb.
1802-60	As above with 3/4" rope	19 1/2 lb.

Other lengths of rope can be furnished to order.

KLEIN HAND LINE

Highest grade four-strand Manila rope spliced to eye of snap hook #443-A. Snap hook is similar to those used on safety straps except that it has a round eye. Hook opens to ¾".

Other lengths of rope can be furnished to order.

Cat. No.	Description	Weight Each
1803-60	With 75 ft. ⅜" rope and #443-A snap	3½ lb.
1804-60	With 75 ft. ⅜" rope and #470 swivel snap	3½ lb.
1803-75	With 75 ft. ½" rope and #443-A snap	5 lb.
1804-75	With 75 ft. ½" rope and #470 swivel snap	5 lb.

KLEIN HOWE WIRE TOOL

Strap made of finest harness leather. Swivel hook of forged steel with large opening. Shank of hook lengthened to reach under insulator. Other end has locking device to hold the load at any distance. All metal parts are galvanized finish.

Cat. No.	Size	Weight Each
1702-20	Leather Strap 1¼" wide, 7' long	2 lb.
241	Extra Leather Strap for Above	
1702-20N	Nylon Strap 1¼" wide, 7' long	2 lb.
241N	Extra Nylon Strap for Above	

KLEIN "CHICAGO" LINEMEN'S TOOL

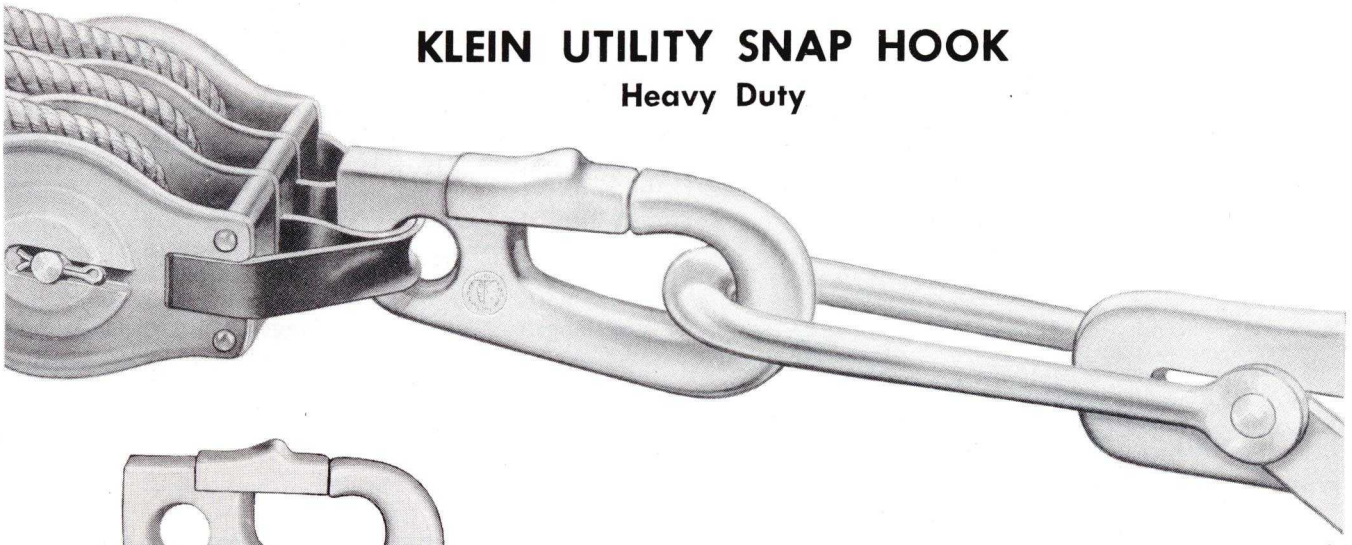
This combines the wire tool shown above #1702-20 with a "Chicago" Grip #1613-30.

Other sizes of grips in this combination can be furnished on special order.

Cat. No.	Size	Weight Each
1700-30	For 6 wire and smaller down to 12 B&S. Leather Strap	3½ lb.
1700-30N	Same as above but with Nylon Strap	3½ lb.

KLEIN UTILITY SNAP HOOK

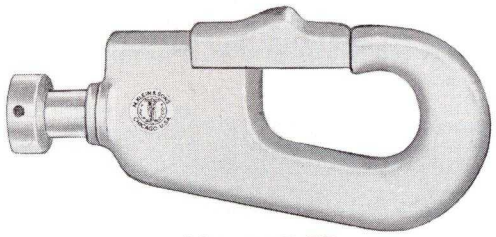
Heavy Duty



No. 455

No. 455-S

No. 455-SH



No. 455-SP

This hook is designed to meet requirements of safety engineers. It will not come loose on a slacked line, is easy to apply and is able to pull up a transformer or other heavy load. No taping or wiring of throat is necessary. Quickly pays for itself in time and material saved. Attaches securely for maximum safety thus guarding groundman.

Made of forged steel designed to carry a working load of 8,000 lb. with adequate safety factor. Snaps on with one hand and may be used on any conventional steel block 4 inches or smaller by simply replacing conventional hook with Klein Snap Hook.

No. 455 furnished with eye 15/16-inch I.D. Can be supplied with eye 1-1/4-inch I.D. for larger block.

Cat. No.	Length	Weight Each
455 solid eye	4-1/2 inches	1 lb.
455-S swivel eye	7-1/2 inches	1-1/4 lb.
455-SH swivel eye for use with 3/4 ton hoist	7-1/2 inches	1-1/4 lb.
455-SH-3 swivel eye for use with 1-1/2 ton hoist	7-1/2 inches	1-1/4 lb.
455-SP with male fixture for 1-1/2 ton hoist's swivel housing	7-1/2 inches	1-1/4 lb.
455-SP-6 with male fixture for 3-ton hoist's swivel housing	7-1/2 inches	1-1/4 lb.

SAFE LOAD ON ALL SNAP HOOKS—8000 LB.

HOOK CAN'T FALL OFF

NO TAPE NECESSARY

WON'T OPEN UNDER HEAVY LOAD

"XELA" ELECTRICIANS' KNIFE

A sturdy knife specially designed for electricians' use. Made of high-grade cutlery steel carefully tempered. Handle is made of special plastic that won't crack or chip.

When the screwdriver is opened, it locks automatically, preventing the blade folding when in use. A slight pressure of the thumb releases the lock. Fitted with wrought shackle riveted in handle. Nominal length of blade 2½"; length of screwdriver 3".

Cat. No.	Size	Average Weight Per Doz.
1550-2	Two-blade knife and screwdriver, 3¾" (closed length)	3 lb.

"XELA" THREE BLADE KNIFE

Similar to 1550-2 but with a spearpoint knife blade, a sheepsfoot blade and a screwdriver blade. Made of high-grade cutlery steel carefully tempered. Handle is of special plastic that won't crack or chip.

Screwdriver blade locks automatically when opened. Fitted with wrought shackle riveted in handle. Nominal length of long blade 2½"—short blade 2"—screwdriver 3".

Cat. No.	Size and Description	Average Weight Per Doz.
1550-6	Three-blade knife and screwdriver 3¾" (closed length)	3½ lb.

"XELA" LINEMAN'S KNIFE

A sturdily constructed knife of highest grade, carefully tempered cutlery steel. Blade is 3" long. Blade automatically locks in open position. Handle is made of special plastic that won't crack or chip. Fitted with wrought shackle riveted in handle. Single blade

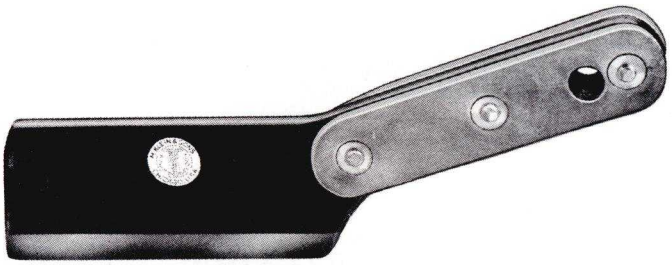
Cat. No.	Size	Average Weight Per Doz.
1550-4	4" (closed length)	4 lb.

"XELA" SKINNING KNIFE

A high-quality knife made of finest cutlery steel carefully tempered. Specially designed for skinning wire. Plastic handle has ring for attaching to snap. Fitted with wrought shackle riveted in handle.

Cat. No.	Size	Average Weight Per Doz.
1550-5	3½" (closed length)	1 lb.

CABLE SHEATH SPLITTING KNIFE
(HEAVY-DUTY BELL SYSTEM TYPE)



A heavy-duty knife for splitting cable sheaths. Blade is finest cutlery steel shaped to a keen edge. Strong leather handle is securely riveted. Tempered blue finish.

Cat. No.	Length Overall	Blade	Average Weight Per Doz.
1515-1	8¾"	4½"	13 lb.

"XELA" ELECTRICIANS' SCISSORS

A scissor specially designed for the electrician and mechanic. Will stand continued hard service. Made of high-grade steel carefully tempered. Has screw hinge allowing adjustment. Nickel plated finish.

Cat. No.	Size	Average Weight Per Doz.
2100-5	5"	2 lb.

PLASTIC HANDLE SKINNING KNIFE

Made of high-grade steel carefully tempered. Handle is of red molded on flame-resistant plastic, providing excellent insulation and comfortable grip. Back of blade is ground flat for scraping. Handy ring for fastening to snap is imbedded in plastic handle. Molded finger guard prevents accidents.

Cat. No.	Length Less Ring	Blade	Average Weight Per Doz.
1570-3	8"	3"	4¼ lb.

1570-3LR as above less ring in handle.

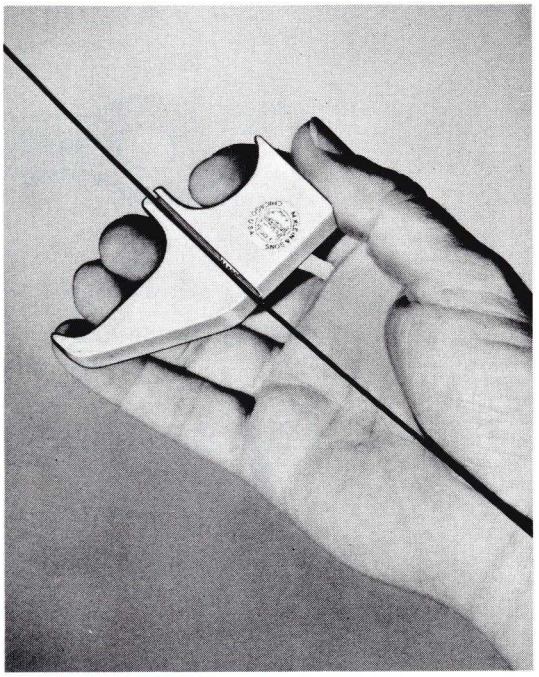
RUBBER HANDLE SKINNING KNIFE

An ideal skinning knife for linemen. Made of high quality steel carefully tempered. The molded handle is of half-hard rubber providing insulation and a comfortable grip. Back of blade is ground flat for scraping. Hole in handle is through solid rubber.

Cat. No.	Length Overall	Blade	Average Weight Per Doz.
1560-3	8"	3"	4¼ lb.

CHICAGO "FISH-TAPE" PULLER

Patent #1,628,744



Here is a simple, husky come-along for fish-tape.

Fish-tape slips sideways into slot and a ratchet wheel assures a strong, positive grip. For a new bite slide the puller forward on the tape. Simple, strong, automatic . . . grips like a vise . . . never slips. Will not injure the tape and its small size permits it to be carried in the pocket.

(We do not supply fish-tape.)

Cat. No.		Average Weight Per Doz.
1629	For standard fish-tapes	2½ lb.
1629-A	Modified for #12 iron wire	2½ lb.

KLEIN LINEMEN'S WRENCH

Forged from selected bar steel heat treated. Open end type with two openings of different sizes at each end. Hole is provided at the larger end so that wrench may be used for turning in standard pole steps.

This wrench is particularly suited for use on the heavier three bolt guy clamps on which clearance is limited. Generally suitable for 5/8 inch hardware.

Openings: Large end—1-3/32" and 29/32"
Small end—13/16" and 5/8"

Cat. No.	Size	Av. Wt. Per Doz.
3146	13" for 5/8" hardware	23 lb.

KLEIN LINEMEN'S WRENCH

Same as above but modified for 3/4 inch hardware.

Openings: Large end—1-1/16" and 1-5/16"
Small end—5/8" and 7/8"

Cat. No.	Size	Av. Wt. Per Doz.
3146-A	13" for 3/4" hardware	23 lb.

KLEIN LINEMEN'S WRENCH

"Bell System" Type
New NEMA Hardware Specifications

Similar to wrenches shown above, but designed to conform to new NEMA Close Nut tolerance standards.

Openings: Large end 1 1/16" and 1 3/16"
Small end 11/16" and 7/8"

Cat. No.	Size	Av. Wt. Per Doz.
3146-B	13"	23 lb.

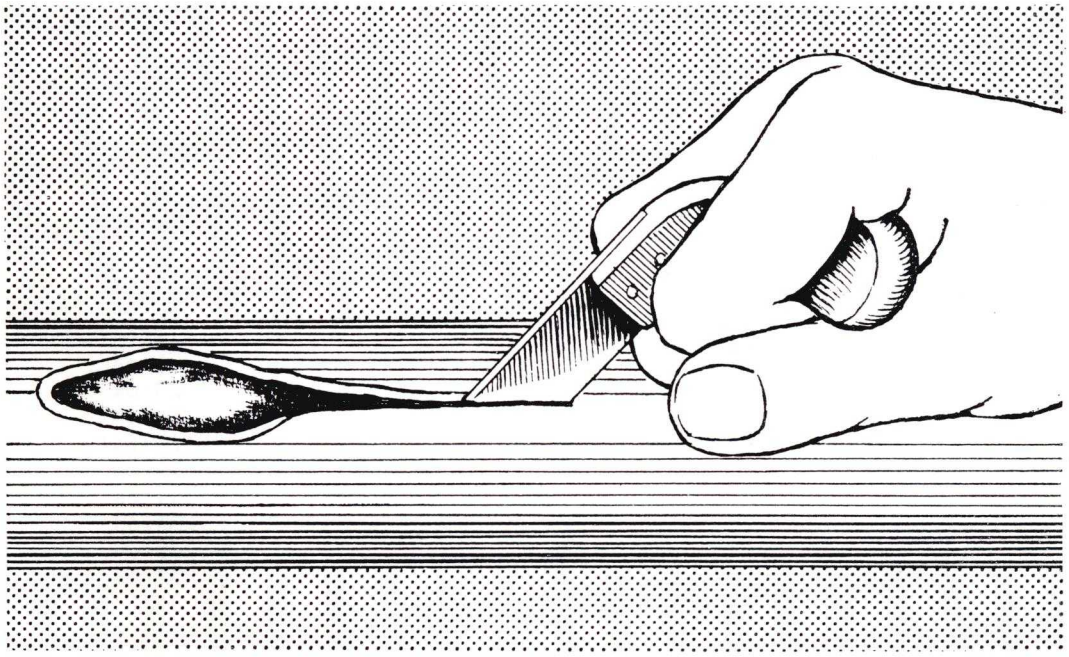
KLEIN SLITTING TOOL

for control cable

This new tool is designed to slit insulation from control cable.

The handle is cast aluminum, light in weight and with convenient grip shaped to fit the hand; knife of tempered tool steel may be sharpened and is easily removed for replacement.

This tool slits tough insulation from a few inches to as many feet as desired, swiftly and simply. It will not damage conductors inside of the weatherproof sheath.



It is easy to slit insulation with the Klein slitting tool. Cut a small section of the insulation away with an electrician's knife, insert the point of the tool as indicated and pull.

Cat. No.	Size	Av. Wt. Per Doz.
1558	4½ x 2½ in.	3 lb.
058-K	Replacement knife and roll pins	

Comparative Sizes of Different Wire Gauges in Decimals of an Inch

No. of Wire Gauge	*American or Brown & Sharpe (B. & S.)	Birmingham or Eng. Wire (B. W. G.)	New British Standard (N. B. S.)
0000	.460	.454	.400
000	.40964	.425	.372
00	.3648	.380	.348
0	.32486	.340	.324
1	.2893	.300	.300
2	.25763	.284	.276
3	.22942	.259	.252
4	.20431	.238	.232
5	.18194	.220	.212
6	.16202	.203	.192
7	.14428	.180	.176
8	.12849	.165	.160
9	.11443	.148	.144
10	.10189	.134	.128
11	.090742	.120	.116
12	.080808	.109	.104
13	.071961	.095	.092
14	.064084	.083	.080
15	.057068	.072	.072
16	.05082	.065	.064
17	.045257	.058	.056
18	.040303	.049	.048
19	.03589	.042	.040
20	.031961	.035	.036
21	.028462	.032	.032
22	.025347	.028	.028
23	.022571	.025	.024
24	.0201	.022	.022
25	.0179	.020	.020
26	.01594	.018	.018
27	.014195	.016	.0164
28	.012641	.014	.0148
29	.011257	.013	.0136
30	.010025	.012	.0124
31	.008928	.010	.0116
32	.00795	.009	.0108
33	.00708	.008	.010
34	.006304	.007	.0092
35	.005614	.005	.0084
36	.005	.004	.0076
37	.004453	------	--------
38	.003965	------	--------
39	.003531	------	--------
40	.003144	------	--------

*The American (B. & S.) gauge is generally used for solid wires of aluminum or copper. The B. W. G. is generally used for steel and iron wire.

Decimal Equivalents of Fractions of an Inch

8ths	
1/8	.125
1/4	.250
3/8	.375
1/2	.500
5/8	.625
3/4	.750
7/8	.875
16ths	
1/16	.0625
3/16	.1875
5/16	.3125
7/16	.4375
9/16	.5625
11/16	.6875
13/16	.8125
15/16	.9375
32ds	
1/32	.03125
3/32	.09375
5/32	.15625
7/32	.21875
9/32	.28125
11/32	.34375
13/32	.40625
15/32	.46875
17/32	.53125
19/32	.59375
21/32	.65625
23/32	.71875
25/32	.78125
27/32	.84375
29/23	.90625
31/32	.96875
64ths	
1/64	.015625
3/64	.046875
5/64	.078125
7/64	.109365
9/64	.140625
11/64	.171875
13/64	.203125
15/64	.234375
17/64	.265625
19/64	.296875
21/64	.328125
23/64	.359375
25/64	.390625
27/64	.421875
29/64	.453125
31/64	.484375
33/64	.515625
35/64	.546875
37/64	.578125
39/64	.609375
41/64	.640625
43/64	.671875
45/64	.703125
47/64	.734375
49/64	.765625
51/64	.796875
53/64	.828125
55/64	.859375
57/64	.890625
59/64	.921875
61/64	.953125
63/64	.984375

Diameters, stranding and ultimate strength of A.C.S.R. and All Aluminum bare cables

Cable Size	A. C. S. R.			ALL ALUMINUM		
	Number of Alum. & Steel Strands	Diameter Inches	Ultimate Strength in Pounds	Diameter Inches	Ultimate Strength in Pounds	Number of Strands
No. 8	6 x 1	.158	745	.....	.....	....
7	6 x 1	.177	935	.....	.....	....
6	6 x 1	.198	1170	.....	.....	....
5	6 x 1	.223	1460	.....	.....	....
4	6 x 1	.250	1830	.232	918	7
4	7 x 1	.257	2288	.....	.....	....
3	6 x 1	.281	2250	.260	1135	7
2	6 x 1	.316	2790	.292	1405	7
2	7 x 1	.325	3535	.....	.....	....
1	6 x 1	.355	3480	.328	1710	7
1/0	6 x 1	.398	4280	.368	2070	7
2/0	6 x 1	.447	5345	.414	2610	7
3/0	6 x 1	.502	6675	.464	3160	7
4/0	6 x 1	.563	8420	.522	3990	7
266800 C.M.	26 x 7	.642	11250	.586	5030	7
266800	6 x 7	.633	9645	.....	.....	....
300000	30 x 7	.700	15430	.629	5890	19
300000	26 x 7	.680	12650	.....	.....	....
336400	30 x 7	.741	17040	.666	6605	19
336400	26 x 7	.721	14050	.....	.....	....
397500	30 x 7	.806	19880	.724	7650	19
397500	26 x 7	.783	16190	.....	.....	....
477000	30 x 7	.883	23300	.793	8990	19
477000	26 x 7	.858	19430	.....	.....	....
500000	30 x 7	.904	24400	.812	9425	19
556500	30 x 7	.953	27200	.856	10490	19
556500	26 x 7	.927	22400	.....	.....	....
605000	26 x 7	.970	24100	.....	.....	....
605000	54 x 7	.953	22500	.....	.....	....
636000	30 x 19	1.019	31500	.918	12490	37
636000	26 x 7	.990	25000	.....	.....	....
636000	54 x 7	.997	23600	.....	.....	....
666600	54 x 7	1.000	24500	.....	.....	....
715500	30 x 19	1.081	34600	.974	14050	37
715500	26 x 7	1.051	28100	.....	.....	....
715500	54 x 7	1.036	26300	.....	.....	....
750000	.....	.....	.....	.997	14430	37
795000	30 x 19	1.140	38400	1.026	15300	37
795000	26 x 7	1.108	31200	.....	.....	....
795000	54 x 7	1.093	28500	.....	.....	....
874500	54 x 7	1.146	31400	1.077	16480	37
900000	54 x 7	1.162	32300	.....	.....	....
954000	54 x 7	1.196	34200	1.124	17980	37
1033500	54 x 7	1.246	37100	1.170	19480	37
1113000	54 x 19	1.293	40200	1.216	21850	61
1192500	54 x 19	1.338	43100	1.250	23400	61
1272000	54 x 19	1.382	44800	1.300	24500	61
1351500	54 x 19	1.424	47600	1.340	26000	61
1431000	54 x 19	1.465	50400	1.379	27000	61
1510500	54 x 19	1.506	53200	.....	.....	....
1515000	.....	.....	.....	1.417	28500	61
1590000	54 x 19	1.545	56000	1.454	30000	61
80000	8 x 1	.367	5200	.....	.....	....
101800	12 x 7	.461	9860	.....	.....	....
110800	12 x 7	.481	10730	.....	.....	....
134600	12 x 7	.530	12920	.....	.....	....
159000	12 x 7	.576	15200	.....	.....	....
176900	12 x 7	.607	16440	.....	.....	....
190800	12 x 7	.631	17730	.....	.....	....
211300	12 x 7	.663	19640	.....	.....	....
203200	16 x 19	.714	27500	.....	.....	....
203000	8 x 7	.584	11140	.....	.....	....

The above information is from data published by Aluminum Company of America. For diameters of weatherproof cables see tables published by the manufacturer.

Diameter and Minimum Breaking Strength of Hard Drawn Copper Wire and Concentric Stranded Cable

Size	Solid Wire Diam.	Solid Wire M. B. S. Lbs.	3-Wire Strand Diam.	3-Wire Strand M. B. S. Lbs.	7-Wire Strand Diam.	7-Wire Strand M. B. S. Lbs.	12-Wire Strand Diam.	12-Wire Strand M. B. S. Lbs.	19-Wire Strand Diam.	19-Wire Strand M. B. S. Lbs.	Anaconda* Hollow Conductor Diam.	Anaconda* Hollow Conductor M. B. S. Lbs.
14 A.W.G.	.064	214	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	.072	268	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	.081	337	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	.091	423	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	.102	529	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	.114	661	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	.128	826	.....	.....	.146	777	.....	.....	.....	.....	.....	.....
7	.144	1030	.....	.....	.164	977	.....	.....	.....	.....	.....	.....
6	.162	1280	.....	.....	.184	1228	.....	.....	.....	.....	.....	.....
5	.181	1591	.....	.....	.206	1542	.....	.....	.....	.....	.....	.....
4	.204	1970	.254	1879	.232	1938	.....	.....	.....	.....	.....	.....
3	.229	2439	.285	2359	.260	2433	.....	.....	.....	.....	.....	.....
2	.258	3003	.320	2913	.292	3045	.....	.....	.....	.....	.....	.....
1	.289	3688	.360	3620	.328	3804	.....	.....	.332	3898	.....	.....
0	.325	4517	.....	.....	.368	4750	.390	4840	.373	4899	.....	.....
00	.365	5519	.....	.....	.414	5927	.437	6049	.419	6153	.526	5890
000	.410	6722	.....	.....	.464	7366	.492	7566	.470	7698	.611	7230
0000	.460	8143	.....	.....	.522	9154	.552	9483	.528	9617	.665	9090
			37-Wire Strand									
250 M.C.M.	.....	.....	.575	11560	.....	.....	.600	11130	.574	11360	.750	10600
300	.....	.....	.630	13870	.....	.....	.657	13170	.629	13510	.766	12700
350	.....	.....	.681	16060	.....	.....	.710	15140	.679	15590	1.000	15320
400	.....	.....	.728	18320	.....	.....	.....	.....	.726	17560	1.000	17150
450	.....	.....	.772	20450	.....	.....	.....	.....	.770	19750	1.000	18770
500	.....	.....	.813	22510	.....	.....	.....	.....	.811	21950	1.004	22400
550	.....	.....	.853	24760	.....	.....	.....	.....	.....	.....	1.008	24470
					61-Wire Strand							
600	.....	.....	.891	27020	.893	27530	.....	.....	.....	.....	1.027	26470
650	.....	.....	.928	29130	.929	29770	.....	.....	.....	.....	1.106	28530
700	.....	.....	.963	31170	.964	31820	.....	.....	.....	.....	1.230	30500
750	.....	.....	.997	33400	.998	34090	.....	.....	.....	.....	1.092	32500
800	.....	.....	1.029	35120	1.031	36360	.....	.....	.....	.....	1.269	34960
900	.....	.....	1.092	39510	1.094	40520	.....	.....	.....	.....	1.261	38920
1000	.....	.....	1.151	43830	1.152	45030	.....	.....	.....	.....	1.257	44440
							91-Wire Strand					
1250	.....	.....	.....	.....	1.288	55670	1.289	56280	.....	.....	1.430	26530**
1500	.....	.....	.....	.....	1.411	65840	1.412	67540	.....	.....	1.645	31860**
1750	.....	.....	.....	.....	.....	.....	1.526	77930	.....	.....	1.843	33440**
2000	.....	.....	.....	.....	.....	.....	1.630	87790	.....	.....	2.018	38300**

*These are typical designs of Anaconda I-Beam Hollow Conductor. Many others of varying physical characteristics and size are available.

**Large sizes of Hollow Conductors are usually made of annealed wires.

This table furnished by courtesy of Anaconda Wire & Cable Company.

T.B. Insulated and U.R.C. Weatherproof Conductors
Outside Diameters and Minimum Breaking Strength

A.W.G. Size	COPPER (Solid) O.D. Inches	M.B.S. Lbs.	COPPER (7 wire strand) O.D. Inches	M.B.S. Lbs.
0000	.782 (25/32)	8143	.860 (55/64)	9154
000	.735 (47/64)	6722	.797 (51/64)	7366
00	.609 (39/64)	5519	.672 (43/64)	5927
0	.563 (9/16)	4517	.609 (39/64)	4750
1	.500 (1/2)	3688	.547 (35/64)	3804
2	.469 (15/32)	3003	.516 (33/64)	3045
3	.422 (27/64)	2439	.469 (15/32)	2433
4	.391 (25/64)	1970	.438 (7/16)	1938
6	.313 (5/16)	1280	.344 (11/32)	1228
8	.281 (9/32)	826	.281 (9/32)	777
10	.250 (1/4)	529		
12	.219 (7/32)	337		
14	.188 (3/16)	214		

Galvanized Steel Strand
Outside Diameters and Minimum Breaking Strength

O.D. Inches	Standard M.B.S. Lbs.	Siemens Martin M.B.S. Lbs.	High Strength M.B.S. Lbs.	Extra High Strength M.B.S. Lbs.
5/8	11600	19100	29600	42400
1/2	7400	12100	18800	26900
7/16	5700	9350	14500	20800
3/8	4250	6950	10800	15400
5/16	3200	5350	8000	11200
1/4	1900	4250	4750	6650
3/16	1150	3150	2850	3990
5/32	870	1900		

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